

TABLES
OF THE
MOTION OF THE MOON

BY

ERNEST W. BROWN

PROFESSOR OF MATHEMATICS IN YALE UNIVERSITY

WITH THE ASSISTANCE OF

HENRY B. HEDRICK

CHIEF COMPUTER



SECTIONS IV, V, VI

NEW HAVEN : YALE UNIVERSITY PRESS

LONDON : HUMPHREY MILFORD

OXFORD UNIVERSITY PRESS

1919

LATITUDE DOUBLE ENTRY IN S.

TABLE I.

Vert. Arg. D.

Hor. Arg. I.

Arg.	0 v	1 v	2 v	3 v	4 v	5 v	6 v	7 v	Arg.
<i>d</i>									<i>d</i>
-0.5	2458 -83	2375 -84 1625	2291 -85 1709	2206 -85 1794	2120 -86 1880	2035 -86 1965	1949 -85 2051	1864 -85 2136	30.5
0.0	2480 83	2396 84 1604	2311 85 1689	2226 86 1774	2139 87 1861	2052 87 1948	1965 87 2035	1879 86 2121	30.0
+0.5	2494 82	2412 83 1588	2328 84 1672	2243 86 1757	2157 86 1843	2071 87 1929	1984 87 2016	1897 87 2103	29.5
1.0	2498 79	2418 81 1582	2337 82 1663	2254 83 1746	2170 84 1830	2086 85 1914	2001 85 1999	1915 85 2085	29.0
1.5	2488 75	2412 77 1588	2334 78 1666	2255 80 1745	2174 81 1826	2093 82 1907	2011 82 1989	1929 83 2071	28.5
2.0	2462 70	2391 72 1609	2318 74 1682	2243 75 1757	2167 77 1833	2090 78 1910	2012 78 1988	1933 79 2067	28.0
2.5	2422 66	2356 67 1644	2288 69 1712	2218 70 1782	2147 72 1853	2075 73 1925	2001 74 1999	1927 74 2073	27.5
3.0	2370 61	2309 62 1691	2245 64 1755	2181 65 1819	2115 67 1885	2048 68 1952	1979 69 2021	1910 69 2090	27.0
3.5	2310 56	2253 58 1747	2194 59 1806	2134 61 1866	2073 62 1927	2011 63 1989	1948 64 2052	1883 64 2117	26.5
4.0	2247 53	2194 54 1806	2139 55 1861	2083 56 1917	2026 57 1974	1968 58 2032	1909 59 2091	1850 60 2150	26.0
4.5	2185 50	2134 51 1866	2083 52 1917	2030 53 1970	1977 54 2023	1922 55 2078	1867 56 2133	1811 56 2189	25.5
5.0	2128 48	2080 49 1920	2030 50 1970	1980 50 2020	1930 51 2070	1878 52 2122	1826 52 2174	1773 53 2227	25.0
5.5	2078 47	2031 47 1969	1984 48 2016	1935 48 2065	1887 49 2113	1837 50 2163	1788 50 2212	1738 50 2262	24.5
6.0	2037 46	1991 46 2009	1944 47 2056	1898 47 2102	1850 47 2150	1803 48 2197	1755 48 2245	1707 48 2293	24.0
6.5	2004 46	1959 46 2041	1913 46 2087	1867 46 2133	1821 46 2179	1775 46 2225	1728 46 2272	1682 46 2318	23.5
7.0	1979 46	1933 45 2067	1888 45 2112	1843 45 2157	1798 45 2202	1753 45 2247	1708 45 2292	1663 45 2337	23.0
7.5	1958 45	1913 45 2087	1868 45 2132	1824 44 2176	1780 44 2220	1736 44 2264	1692 43 2308	1649 43 2351	22.5
8.0	1940 45	1895 44 2105	1851 44 2149	1807 43 2193	1764 43 2236	1721 42 2279	1679 42 2321	1637 42 2363	22.0
8.5	1922 45	1877 44 2123	1834 43 2166	1791 43 2209	1749 43 2251	1707 43 2293	1666 40 2334	1626 40 2374	21.5
9.0	1902 45	1858 44 2142	1815 43 2185	1773 42 2227	1731 41 2269	1691 40 2309	1651 39 2349	1612 38 2388	21.0
9.5	1881 45	1836 44 2164	1794 42 2206	1752 41 2248	1711 40 2289	1671 39 2329	1632 38 2368	1594 37 2406	20.5
10.0	1857 45	1812 44 2188	1769 43 2231	1727 41 2273	1686 40 2314	1647 39 2353	1608 38 2392	1572 36 2428	20.0
10.5	1833 46	1787 45 2213	1743 44 2257	1700 42 2309	1659 41 2341	1619 39 2381	1580 38 2420	1543 36 2457	19.5
11.0	1811 48	1763 47 2237	1717 45 2283	1673 44 2327	1630 42 2370	1589 40 2411	1549 39 2451	1511 37 2489	19.0
11.5	1794 51	1744 49 2256	1696 48 2304	1649 46 2351	1604 44 2396	1560 43 2440	1518 41 2482	1479 39 2521	18.5
12.0	1786 54	1733 52 2267	1681 51 2319	1631 49 2369	1583 47 2417	1536 46 2464	1492 44 2508	1449 42 2551	18.0
12.5	1790 58	1733 56 2267	1677 55 2323	1624 53 2376	1571 51 2429	1521 49 2479	1473 47 2527	1427 45 2573	17.5
13.0	1808 61	1747 60 2253	1688 59 2312	1630 57 2370	1573 55 2427	1519 54 2481	1466 51 2534	1416 49 2584	17.0
13.5	1840 65	1775 64 2225	1712 63 2288	1650 61 2350	1590 60 2410	1531 58 2469	1474 56 2526	1419 54 2581	16.5
14.0	1885 68	1818 67 2182	1751 66 2249	1686 65 2314	1622 63 2378	1559 62 2441	1498 60 2502	1439 58 2561	16.0
14.5	1940 70	1870 69 2130	1802 68 2198	1734 68 2266	1666 66 2334	1601 65 2399	1537 63 2463	1474 61 2526	15.5
15.0	2000 70	1930 70 2070	1860 70 2140	1790 69 2210	1722 68 2278	1654 67 2346	1588 66 2412	1523 64 2477	15.0
15.5	2060 70	1991 70 2009	1921 70 2079	1851 70 2149	1782 69 2218	1714 68 2286	1646 67 2354	1580 66 2420	14.5
16.0	2115 68	2047 68 1953	1979 68 2021	1910 68 2090	1842 68 2158	1774 68 2226	1707 67 2293	1640 66 2360	14.0
16.5	2160 65	2095 66 1905	2029 66 1971	1963 66 2037	1897 66 2103	1830 66 2170	1764 66 2236	1698 65 2302	13.5
17.0	2192 61	2130 62 1870	2068 63 1932	2005 64 1995	1941 64 2059	1877 64 2123	1813 64 2187	1749 64 2251	13.0
17.5	2210 58	2152 59 1848	2093 60 1907	2033 60 1967	1973 61 2027	1911 61 2089	1850 61 2150	1788 61 2212	12.5
18.0	2214 54	2160 55 1840	2104 56 1896	2047 57 1953	1990 58 2010	1932 58 2068	1873 59 2127	1814 59 2186	12.0
18.5	2206 51	2155 52 1845	2102 53 1898	2049 54 1951	1994 55 2006	1939 56 2061	1883 56 2117	1826 56 2174	11.5
19.0	2189 48	2140 49 1860	2091 50 1909	2040 52 1960	1988 52 2012	1935 53 2065	1881 52 2119	1827 52 2173	11.0
19.5	2167 46	2120 48 1880	2072 49 1928	2023 50 1977	1973 50 2027	1922 51 2078	1870 52 2130	1817 53 2183	10.5
20.0	2143 45	2097 46 1903	2050 47 1950	2003 48 1997	1954 49 2046	1904 50 2096	1854 51 2146	1802 52 2198	10.0
20.5	2119 45	2074 46 1926	2028 47 1972	1981 48 2019	1933 48 2067	1884 49 2116	1834 50 2166	1784 50 2216	9.5
21.0	2098 45	2053 45 1947	2007 46 1993	1960 47 2040	1913 48 2087	1864 49 2136	1815 49 2185	1766 50 2234	9.0
21.5	2078 45	2033 45 1967	1987 46 2013	1941 47 2059	1894 47 2106	1846 48 2154	1798 49 2202	1749 49 2251	8.5
22.0	2060 45	2015 46 1985	1969 46 2031	1923 46 2077	1876 47 2124	1829 48 2171	1781 48 2219	1733 48 2267	8.0
22.5	2042 45	1997 46 2003	1951 46 2049	1905 46 2095	1859 46 2141	1812 47 2188	1765 47 2235	1718 48 2282	7.5
23.0	2021 46	1976 46 2024	1930 46 2070	1884 46 2116	1839 46 2161	1793 46 2207	1746 46 2254	1700 46 2300	7.0
23.5	1996 46	1950 46 2050	1905 45 2095	1859 45 2141	1814 45 2186	1769 45 2231	1724 45 2276	1679 45 2321	6.5
24.0	1963 46	1917 46 2083	1872 45 2128	1826 45 2174	1782 45 2218	1737 44 2263	1693 44 2307	1649 44 2351	6.0
24.5	1922 47	1875 46 2125	1830 46 2170	1784 45 2216	1740 44 2260	1696 44 2304	1652 43 2348	1609 42 2391	5.5
25.0	1872 48	1824 47 2176	1778 46 2222	1732 45 2268	1687 44 2313	1643 44 2357	1600 43 2400	1558 42 2442	5.0
25.5	1815 50	1766 49 2234	1718 48 2282	1671 46 2329	1625 45 2375	1580 44 2420	1537 43 2463	1495 42 2505	4.5
26.0	1753 53	1701 52 2299	1650 50 2350	1601 48 2399	1553 47 2447	1508 45 2492	1463 44 2537	1420 42 2580	4.0
26.5	1690 56	1635 55 2365	1581 53 2419	1529 51 2471	1478 49 2522	1430 48 2570	1383 46 2617	1339 44 2661	3.5
27.0	1630 61	1570 59 2430	1512 57 2488	1456 55 2544	1402 53 2598	1351 51 2649	1301 48 2699	1254 46 2746	3.0
27.5	1578 66	1514 64 2486	1451 61 2549	1391 59 2609	1332 57 2668	1277 54 2723	1224 52 2776	1173 49 2827	2.5
28.0	1538 70	1468 68 2532	1401 66 2599	1336 64 2664	1274 61 2726	1214 59 2786	1156 56 2844	1102 53 2898	2.0
28.5	1512 75	1438 73 2562	1366 71 2634	1297 68 2703	1230 66 2779	1165 63 2835	1104 60 2896	1045 57 2955	1.5
29.0	1502 79	1424 77 2576	1348 75 2652	1275 72 2725	1204 70 2796	1135 67 2865	1070 64 2930	1007 61 2993	1.0
29.5	1506 82	1425 80 2575	1346 78 2654	1270 75 2730	1195 73 2805	1124 70 2876	1055 67 2945	989 64 3011	+0.5
30.0	1520 83	1438 81 2562	1358 79 2642	1280 77 2720	1204 75 2796	1130 72 2870	1059 70 2941	991 66 3009	0.0
30.5	1542 -83	1460 -81 2540	1379 -80 2621	1300 -78 2700	1224 -76 2776	1149 -73 2851	1077 -70 2923	1008 -68 2992	-0.5
Arg.		v 140	v 139	v 138	v 137	v 136	v 135	v 134	Arg.

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*Gift
Author to The University
Jan. 4 '20*



TABLES OF THE MOON. SECT. IV.

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

Table with columns for Arg., 8 v, 9 v, 10 v, 11 v, 12 v, 13 v, 14 v, and Arg. containing numerical data for various angles.

LATITUDE DOUBLE ENTRY IN S.

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

Table with columns for Arg., 15 v, 16 v, 17 v, 18 v, 19 v, 20 v, 21 v, and Arg. containing numerical data for various angles.

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

Arg.	22 v	23 v	24 v	25 v	26 v	27 v	28 v	Arg.
d								d
-0.5	807-49 3193	760-46 3240	716-42 3284	676-38 3324	640-34 3360	607-31 3393	579-27 3421	30.5
0.0	779 52 3221	729 48 3271	682 45 3318	640 41 3360	601 37 3399	566 33 3434	535 29 3465	30.0
+0.5	773 54 3227	721 51 3279	672 47 3328	627 43 3373	586 39 3414	549 35 3451	516 31 3484	29.5
1.0	786 56 3214	732 52 3268	682 49 3318	635 45 3365	592 41 3408	553 37 3447	518 33 3482	29.0
1.5	814 57 3186	759 53 3241	707 50 3293	660 46 3340	616 42 3384	575 38 3425	539 34 3461	28.5
2.0	850 57 3150	795 53 3205	743 50 3257	695 46 3305	650 43 3350	610 39 3390	573 35 3427	28.0
2.5	888 56 3112	834 53 3166	782 49 3218	735 46 3265	690 43 3310	649 39 3351	612 35 3388	27.5
3.0	923 54 3077	870 51 3130	820 48 3180	773 45 3227	729 42 3271	688 39 3312	652 35 3348	27.0
3.5	951 52 3049	900 50 3100	851 47 3149	805 44 3195	762 41 3238	723 38 3277	686 35 3314	26.5
4.0	971 50 3020	922 48 3078	875 46 3125	830 43 3170	788 40 3212	749 38 3251	713 35 3287	26.0
4.5	982 48 3018	935 46 3065	890 44 3110	847 42 3153	806 40 3194	768 37 3232	732 34 3268	25.5
5.0	988 46 3012	943 45 3057	899 43 3101	858 41 3142	818 39 3182	780 36 3220	746 34 3254	25.0
5.5	992 44 3008	948 43 3052	906 41 3094	865 40 3135	826 38 3174	790 35 3210	756 33 3244	24.5
6.0	996 43 3004	954 41 3046	913 40 3087	874 38 3126	836 37 3164	801 35 3199	767 33 3233	24.0
6.5	1004 41 2996	964 40 3036	924 39 3076	887 37 3113	850 35 3150	816 34 3184	783 32 3217	23.5
7.0	1018 39 2982	979 38 3021	942 37 3058	906 35 3094	871 34 3129	838 33 3162	806 31 3194	23.0
7.5	1038 37 2962	1002 36 2998	967 35 3033	932 34 3068	900 32 3100	868 31 3132	838 29 3162	22.5
8.0	1064 34 2936	1030 33 2970	997 32 3003	966 31 3034	935 30 3065	905 29 3095	877 28 3123	22.0
8.5	1092 31 2908	1062 30 2938	1032 29 2968	1003 28 2997	975 27 3025	948 26 3052	923 25 3077	21.5
9.0	1120 28 2880	1093 27 2907	1067 26 2933	1042 25 2958	1017 24 2983	993 23 3007	971 22 3029	21.0
9.5	1143 24 2857	1119 23 2881	1097 22 2903	1075 21 2925	1054 20 2946	1034 20 2966	1015 19 2985	20.5
10.0	1157 20 2843	1137 19 2863	1118 18 2882	1100 17 2900	1084 16 2916	1068 16 2932	1052 15 2948	20.0
10.5	1157 16 2843	1142 15 2858	1127 14 2883	1113 13 2887	1100 12 2900	1088 12 2912	1077 11 2923	19.5
11.0	1143 13 2857	1130 12 2870	1119 11 2881	1108 10 2892	1099 9 2901	1091 8 2909	1084 7 2916	19.0
11.5	1113 11 2887	1103 10 2897	1094 8 2906	1087 7 2913	1081 5 2919	1076 4 2924	1072 3 2928	18.5
12.0	1071 10 2920	1062 8 2938	1055 6 2945	1050 4 2950	1046 3 2954	1044 1 2956	1043 0 2957	18.0
12.5	1019 9 2981	1011 7 2989	1005 5 2995	1001 3 2999	999 1 3001	998 0 3002	1000 + 2 3000	17.5
13.0	966 10 3034	957 8 3043	950 5 3050	946 3 3054	944 1 3056	944 + 1 3056	947 3 3053	17.0
13.5	916 12 3084	905 9 3095	897 7 3103	892 4 3108	890 1 3110	889 + 1 3111	892 3 3108	16.5
14.0	877 15 3123	864 12 3136	853 9 3147	846 6 3154	842 3 3158	840 0 3160	841 2 3159	16.0
14.5	853 18 3147	837 15 3163	824 12 3176	814 9 3186	807 5 3193	803 2 3197	802 + 1 3198	15.5
15.0	848 22 3152	828 18 3172	811 15 3189	798 12 3202	788 8 3212	781 5 3219	778 - 2 3222	15.0
15.5	860 25 3140	836 22 3164	816 18 3184	800 15 3200	786 12 3214	776 8 3224	770 5 3230	14.5
16.0	888 29 3112	860 25 3140	837 22 3163	817 18 3183	800 15 3200	787 12 3213	777 8 3223	14.0
16.5	925 32 3075	895 28 3105	868 25 3132	845 22 3155	825 18 3175	809 15 3191	796 11 3204	13.5
17.0	966 34 3034	933 31 3067	904 28 3096	878 24 3122	855 21 3145	836 18 3164	820 14 3180	13.0
17.5	1004 36 2996	970 33 3030	938 30 3062	909 27 3091	884 24 3116	862 21 3138	843 17 3157	12.5
18.0	1035 38 2965	998 35 3002	965 32 3035	934 29 3066	906 26 3094	882 23 3118	860 20 3140	12.0
18.5	1054 39 2940	1016 37 2984	981 34 3019	948 31 3052	918 28 3082	892 25 3108	868 22 3132	11.5
19.0	1062 41 2938	1023 38 2977	986 36 3014	951 33 3049	920 30 3080	891 27 3109	865 24 3135	11.0
19.5	1060 42 2940	1019 39 2981	981 37 3019	945 35 3055	911 32 3089	881 29 3119	853 26 3147	10.5
20.0	1049 43 2951	1008 41 2992	968 38 3032	931 36 3069	896 34 3104	863 31 3137	833 28 3167	10.0
20.5	1035 44 2965	993 42 3021	952 40 3048	913 38 3087	877 35 3123	843 33 3157	812 30 3188	9.5
21.0	1022 44 2978	979 42 3021	937 40 3063	898 38 3102	860 36 3140	825 34 3175	792 32 3208	9.0
21.5	1012 44 2988	969 43 3031	927 41 3073	886 39 3114	848 37 3152	812 35 3188	778 33 3222	8.5
22.0	1009 44 2991	965 43 3035	923 41 3077	883 39 3117	845 38 3155	808 36 3192	774 33 3226	8.0
22.5	1012 43 2988	969 42 3031	928 40 3072	888 39 3112	850 37 3150	814 35 3186	779 33 3221	7.5
23.0	1020 41 2980	979 40 3021	939 39 3061	900 38 3100	864 36 3136	828 34 3172	795 33 3205	7.0
23.5	1030 39 2970	992 38 3008	954 37 3046	918 36 3082	883 34 3117	849 33 3151	817 31 3183	6.5
24.0	1039 36 2961	1003 35 2997	968 34 3032	935 33 3065	902 32 3098	872 30 3128	842 29 3158	6.0
24.5	1040 32 2960	1008 32 2992	978 30 3022	948 29 3052	919 28 3081	891 27 3109	865 25 3135	5.5
25.0	1030 28 2970	1002 27 2998	975 26 3025	950 25 3050	925 24 3075	902 23 3098	880 21 3120	5.0
25.5	1004 24 2996	981 23 3019	958 22 3042	937 20 3063	917 19 3083	898 18 3102	881 17 3119	4.5
26.0	961 20 3039	942 19 3058	924 17 3076	907 16 3093	892 15 3108	878 13 3122	865 12 3135	4.0
26.5	898 16 3102	883 14 3117	870 13 3130	858 11 3142	847 10 3153	838 8 3162	831 7 3169	3.5
27.0	822 13 3178	810 11 3190	800 9 3200	792 7 3208	786 5 3214	782 4 3218	779 2 3221	3.0
27.5	734 10 3266	726 8 3274	719 6 3281	715 3 3285	712 1 3288	712 1 3288	713 + 3 3288	2.5
28.0	645 8 3355	638 6 3362	634 3 3366	632 1 3368	632 + 2 3368	635 4 3365	640 6 3360	2.0
28.5	561 8 3439	555 4 3445	552 2 3448	552 + 1 3448	555 4 3445	560 7 3440	568 9 3432	1.5
29.0	490 8 3510	484 4 3516	482 1 3518	483 2 3517	486 5 3514	493 8 3507	503 11 3497	1.0
29.5	438 8 3562	432 4 3568	429 1 3571	430 3 3570	434 6 3566	442 9 3558	452 12 3548	+0.5
30.0	408 9 3592	401 5 3599	398 2 3602	398 2 3602	402 6 3598	409 9 3591	420 13 3580	0.0
30.5	401 10 3599	393 6 3607	388 3 3612	388 + 1 3612	391 5 3609	398 + 9 3602	408 + 12 3592	-0.5
Arg.	v 119	v 118	v 117	v 116	v 115	v 114	v 113	Arg.

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

Arg.	29 v	30 v	31 v	32 v	33 v	34 v	35 v	Arg.
d								d
-0.5	554-23 3446	532-20 3468	514-16 3486	500-12 3500	490-9 3510	482-6 3518	478-2 3522	30.5
0.0	508 25 3492	485 21 3515	466 17 3534	451 14 3549	439 10 3561	431 6 3569	427 2 3573	30.0
+0.5	487 27 3513	462 23 3538	441 19 3559	424 15 3576	412 11 3588	403 7 3597	398 3 3602	29.5
1.0	488 29 3512	461 24 3539	439 20 3561	420 16 3580	406 12 3594	396 8 3604	390 4 3610	29.0
1.5	507 30 3493	479 26 3521	455 22 3545	435 18 3565	420 14 3580	408 10 3592	401 5 3599	28.5
2.0	539 31 3461	510 27 3490	486 23 3514	464 19 3536	448 15 3552	435 11 3565	426 7 3574	28.0
2.5	579 32 3421	549 28 3451	523 24 3477	501 20 3499	483 16 3517	470 12 3530	460 8 3540	27.5
3.0	618 32 3382	588 28 3412	562 24 3438	539 20 3461	520 16 3480	506 13 3494	495 9 3505	27.0
3.5	652 32 3348	622 28 3378	596 25 3404	573 21 3427	554 17 3446	538 14 3462	527 10 3473	26.5
4.0	680 31 3320	650 28 3350	624 25 3376	600 21 3400	581 18 3419	564 14 3436	552 10 3448	26.0
4.5	700 31 3300	670 28 3330	643 25 3357	620 22 3380	600 18 3400	583 15 3417	570 11 3430	25.5
5.0	713 31 3287	684 28 3316	657 25 3343	633 22 3367	613 19 3387	596 16 3404	582 12 3418	25.0
5.5	724 31 3276	695 28 3305	668 25 3332	644 22 3356	623 19 3377	605 16 3395	591 13 3409	24.5
6.0	736 30 3264	707 28 3293	680 25 3320	656 23 3344	635 20 3365	616 17 3384	601 14 3399	24.0
6.5	752 30 3248	724 28 3276	697 25 3303	673 23 3327	652 20 3348	633 17 3367	617 15 3383	23.5
7.0	776 29 3224	748 27 3252	722 25 3279	697 23 3302	677 20 3323	658 18 3342	642 15 3358	23.0
7.5	809 28 3191	782 26 3218	757 24 3243	734 22 3				

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

Arg.	50 v	51 v	52 v	53 v	54 v	55 v	56 v	Arg.
d								d
-0.5	750+34 3250	784+35 3216	820+36 3180	857+38 3143	895+39 3105	935+40 3065	975+41 3025	30.5
0.0	725 37 3275	763 39 3237	802 40 3198	843 41 3157	885 43 3115	928 44 3072	972 45 3028	30.0
+0.5	710 39 3290	750 41 3250	793 43 3207	836 44 3164	881 45 3119	927 46 3073	974 48 3026	29.5
1.0	707 41 3293	750 43 3250	794 45 3206	839 46 3161	886 48 3114	934 49 3066	984 50 3016	29.0
1.5	710 42 3284	760 45 3240	805 46 3195	852 48 3148	900 49 3100	950 51 3050	1002 52 2998	28.5
2.0	734 43 3266	778 45 3222	824 47 3176	872 49 3128	921 50 3079	973 52 3027	1025 53 2975	28.0
2.5	757 43 3243	801 45 3199	847 47 3153	896 50 3104	946 51 3054	998 53 3002	1051 54 2949	27.5
3.0	779 43 3221	823 45 3177	870 48 3130	919 50 3081	969 52 3031	1022 54 2978	1076 55 2924	27.0
3.5	797 43 3203	841 45 3159	887 48 3113	936 50 3064	987 52 3013	1040 54 2960	1095 56 2905	26.5
4.0	807 42 3193	851 45 3149	897 47 3103	946 50 3054	997 52 3003	1050 54 2950	1106 56 2894	26.0
4.5	809 42 3191	852 45 3148	898 47 3102	946 50 3054	997 52 3003	1051 55 2949	1107 57 2893	25.5
5.0	802 41 3198	844 44 3156	890 47 3110	938 50 3062	988 52 3012	1042 54 2958	1098 57 2902	25.0
5.5	790 39 3210	831 43 3109	876 46 3124	923 49 3077	973 51 3027	1026 54 2974	1082 57 2918	24.5
6.0	778 38 3222	817 41 3183	860 44 3140	906 47 3094	955 50 3045	1007 53 2993	1061 56 2939	24.0
6.5	768 36 3232	806 39 3194	847 43 3153	891 46 3109	939 49 3061	989 52 3011	1042 54 2958	23.5
7.0	768 34 3232	804 37 3196	842 40 3158	884 44 3116	929 46 3071	977 50 3023	1028 52 2972	23.0
7.5	780 31 3220	812 34 3188	848 38 3152	888 41 3112	930 44 3070	975 47 3025	1024 50 2976	22.5
8.0	806 28 3194	836 32 3164	869 34 3131	905 38 3095	944 41 3056	986 44 3014	1032 47 2968	22.0
8.5	848 26 3152	875 28 3125	905 32 3095	938 34 3062	974 37 3026	1013 40 2987	1054 43 2946	21.5
9.0	905 23 3095	929 26 3071	956 28 3044	986 31 3014	1018 34 2982	1054 36 2946	1092 39 2908	21.0
9.5	973 20 3027	995 23 3005	1020 26 2980	1046 28 2954	1076 31 2924	1108 33 2892	1142 36 2858	20.5
10.0	1048 19 2952	1068 21 2932	1090 23 2910	1115 26 2885	1142 28 2858	1170 30 2830	1202 32 2798	20.0
10.5	1123 18 2877	1142 20 2858	1163 22 2837	1186 24 2814	1211 26 2789	1238 28 2762	1267 30 2733	19.5
11.0	1193 18 2807	1212 20 2788	1233 21 2767	1255 23 2745	1279 24 2721	1304 26 2696	1331 28 2669	19.0
11.5	1253 19 2747	1273 21 2727	1294 22 2706	1316 23 2684	1340 24 2660	1365 26 2635	1391 27 2609	18.5
12.0	1297 21 2703	1319 22 2681	1341 23 2659	1364 24 2636	1389 25 2611	1414 26 2586	1440 27 2560	18.0
12.5	1324 23 2676	1348 24 2652	1372 25 2628	1397 25 2603	1423 26 2577	1447 27 2551	1476 28 2524	17.5
13.0	1333 26 2667	1360 27 2640	1386 27 2614	1414 28 2586	1441 28 2559	1470 28 2530	1498 29 2502	17.0
13.5	1328 29 2672	1356 29 2644	1386 30 2614	1416 30 2584	1446 30 2554	1476 30 2524	1506 31 2494	16.5
14.0	1310 31 2690	1342 32 2658	1374 32 2626	1406 32 2594	1438 32 2562	1471 33 2529	1503 33 2497	16.0
14.5	1287 34 2713	1321 34 2679	1355 34 2645	1389 34 2611	1424 35 2576	1458 34 2542	1493 35 2507	15.5
15.0	1262 36 2738	1298 36 2702	1334 36 2666	1370 36 2630	1406 36 2594	1443 36 2557	1479 37 2521	15.0
15.5	1238 37 2762	1276 37 2724	1313 38 2687	1351 38 2649	1388 38 2612	1426 38 2574	1465 38 2535	14.5
16.0	1218 38 2782	1256 38 2744	1295 38 2705	1334 39 2666	1373 39 2627	1412 40 2588	1452 39 2548	14.0
16.5	1202 38 2798	1240 39 2760	1280 40 2720	1320 40 2680	1360 40 2640	1400 41 2600	1441 41 2559	13.5
17.0	1187 39 2813	1226 39 2774	1266 40 2734	1307 41 2693	1348 41 2652	1389 42 2611	1431 42 2569	13.0
17.5	1171 39 2829	1210 40 2790	1251 41 2749	1292 42 2708	1334 42 2666	1377 43 2623	1421 44 2579	12.5
18.0	1150 40 2850	1190 41 2810	1231 42 2769	1273 43 2727	1317 44 2683	1361 45 2639	1406 45 2594	12.0
18.5	1121 40 2879	1162 41 2838	1204 43 2796	1248 44 2752	1292 45 2708	1338 46 2662	1385 47 2615	11.5
19.0	1084 40 2916	1125 42 2875	1168 44 2832	1213 46 2787	1259 47 2741	1307 48 2693	1356 50 2644	11.0
19.5	1038 41 2962	1080 43 2920	1124 45 2876	1170 47 2830	1218 49 2782	1267 50 2733	1318 52 2682	10.5
20.0	985 41 3015	1027 44 2973	1072 46 2928	1119 48 2881	1168 50 2832	1219 52 2781	1272 54 2728	10.0
20.5	928 41 3072	971 44 3029	1016 47 2984	1064 49 2936	1114 51 2886	1167 53 2833	1221 55 2779	9.5
21.0	873 41 3127	916 44 3084	961 47 3039	1009 49 2991	1059 52 2941	1112 54 2888	1168 56 2832	9.0
21.5	824 40 3176	865 43 3135	910 46 3090	958 49 3042	1008 52 2922	1061 54 2939	1117 57 2883	8.5
22.0	785 39 3215	825 42 3175	869 45 3131	915 48 3085	964 51 3036	1017 54 2983	1072 57 2928	8.0
22.5	760 37 3240	798 40 3202	840 43 3160	885 47 3115	933 50 3067	984 52 3016	1038 55 2962	7.5
23.0	752 35 3248	788 38 3212	828 42 3172	871 44 3129	917 48 3083	966 52 3034	1018 53 2982	7.0
23.5	761 32 3239	795 36 3205	833 39 3167	873 42 3127	917 45 3083	964 48 3030	1013 51 2987	6.5
24.0	788 30 3212	820 34 3180	855 37 3145	893 40 3107	934 43 3066	979 46 3021	1026 48 2974	6.0
24.5	830 28 3170	860 31 3140	892 34 3108	928 37 3072	967 40 3033	1009 43 2991	1053 46 2947	5.5
25.0	882 27 3118	910 30 3090	942 33 3058	976 36 3024	1013 38 2987	1052 41 2948	1094 43 2906	5.0
25.5	940 27 3060	968 29 3032	998 32 3002	1032 34 2968	1067 37 2933	1105 39 2895	1145 42 2855	4.5
26.0	999 27 3001	1027 30 2973	1058 32 2942	1091 34 2909	1126 36 2874	1163 38 2837	1202 40 2798	4.0
26.5	1054 29 2946	1084 31 2916	1115 32 2885	1149 35 2851	1184 36 2816	1222 38 2778	1261 40 2739	3.5
27.0	1102 31 2898	1134 33 2866	1168 34 2832	1203 36 2797	1240 38 2760	1278 40 2722	1318 41 2682	3.0
27.5	1141 34 2859	1176 36 2824	1212 37 2788	1249 38 2751	1288 40 2712	1328 41 2672	1369 42 2631	2.5
28.0	1170 38 2830	1208 39 2792	1247 40 2753	1288 41 2712	1329 42 2671	1372 43 2628	1415 44 2585	2.0
28.5	1191 41 2809	1233 42 2767	1276 43 2724	1319 44 2681	1363 45 2637	1408 46 2592	1454 48 2546	1.5
29.0	1208 45 2792	1254 46 2740	1300 46 2700	1346 47 2654	1393 48 2607	1441 48 2559	1489 48 2511	1.0
29.5	1224 48 2776	1273 49 2727	1322 49 2678	1371 50 2629	1421 50 2579	1472 50 2528	1522 51 2478	+0.5
30.0	1242 51 2758	1293 52 2707	1345 52 2655	1397 52 2603	1450 53 2550	1502 53 2498	1555 53 2445	0.0
30.5	1264+54 2736	1318+54 2682	1373+54 2627	1427+54 2573	1481+55 2519	1536+55 2464	1591+54 2409	-0.5
Arg.	v 91	v 90	v 89	v 88	v 87	v 86	v 85	Arg.

Arg.	57 v	58 v	59 v	60 v	61 v	62 v	63 v	Arg.
d								d
-0.5	1017+42 2983	1059+43 2941	1102+44 2898	1146+44 2854	1191+45 2809	1236+46 2764	1282+46 2718	30.5
0.0	1017 46 2983	1063 46 2937	1110 47 2890	1157 48 2843	1205 48 2795	1254 49 2746	1303 50 2697	30.0
+0.5	1023 48 2977	1072 49 2928	1121 50 2879	1172 51 2828	1223 51 2777	1274 52 2726	1326 52 2674	29.5
1.0	1034 51 2966	1086 52 2914	1138 53 2862	1191 53 2809	1244 53 2756	1298 54 2702	1352 54 2648	29.0
1.5	1054 53 2946	1107 54 2893	1161 54 2839	1216 55 2784	1272 56 2728	1327 56 2673	1383 56 2617	28.5
2.0	1079 54 2921	1134 55 2866	1189 56 2811	1246 57 2754	1303 57 2697	1360 58 2640	1418 58 2582	28.0
2.5	1106 55 2894	1162 56 2838	1219 57 2781	1277 58 2723	1336 59 2664	1394 59 2606	1454 60 2546	27.5
3.0	1132 56 2868	1189 58 2811	1247 59 2753	1306 60 2694	1366 60 2634	1426 61 2574	1487 61 2513	27.0
3.5	1152 57 2848	1210 58 2790	1269 60 2731	1329 61 2671	1390 62 2610	1453 62 2547	1515 63 2485	26.5
4.0	1163 58 2837	1222 60 2778	1282 61 2718	1344 62 2656	1406 63 2594	1470 64 2530	1534 65 2466	26.0
4.5	1164 59 2836	1224 60 2776	1285 62 2715	1348 63 2652	1412 64 2588	1477 66 2523	1543 66 2457	25.5
5.0	1155 59 2845	1216 61 2784	1278 63 2722	1341 64 2659	1406 66 2594	1472 67 2528	1540 68 2480	25.0
5.5	1139 59 2861	1199 61 2801	1262 63 2738	1325 65 2675	1391 66 2609	1458 68 2542	1527 69 2473	24.5
6.0	1119 58 2881	1178 61 2822	1240 63 2760	1304 65 2696	1369 66 2631	1437 68 2563	1506 70 2494	

TABLE I (concl.).

Vert. Arg. D.

Hor. Arg. 1.

Arg.	64 v	65 v	66 v	67 v	68 v	69 v	70 v	Arg.
d								d
-0.5	1329+47 2671	1376+48 2624	1424+48 2576	1472+48 2528	1520+49 2480	1570+49 2430	1619+50 2381	30.5
0.0	1353 50 2647	1403 50 2597	1453 50 2547	1504 51 2496	1554 51 2446	1606 51 2394	1657 52 2343	30.0
+0.5	1378 52 2622	1430 53 2570	1483 53 2517	1536 53 2464	1589 53 2411	1642 53 2358	1695 53 2305	29.5
1.0	1407 55 2593	1461 55 2539	1516 55 2484	1571 55 2429	1625 54 2375	1680 54 2320	1734 54 2266	29.0
1.5	1440 56 2560	1496 56 2504	1553 56 2447	1609 56 2391	1665 56 2335	1721 56 2279	1777 56 2223	28.5
2.0	1476 58 2524	1534 58 2466	1592 58 2408	1650 58 2350	1708 58 2292	1765 57 2235	1822 57 2178	28.0
2.5	1513 60 2487	1573 60 2427	1633 60 2367	1692 59 2308	1751 59 2249	1810 58 2190	1868 58 2132	27.5
3.0	1548 61 2452	1610 61 2390	1671 61 2329	1732 61 2268	1793 61 2207	1854 60 2146	1914 60 2086	27.0
3.5	1578 63 2422	1641 63 2359	1704 63 2296	1768 63 2232	1831 63 2169	1893 62 2107	1955 62 2045	26.5
4.0	1599 65 2401	1664 65 2336	1729 65 2271	1795 65 2205	1860 65 2140	1924 64 2076	1988 64 2012	26.0
4.5	1609 67 2391	1676 67 2324	1744 67 2256	1811 67 2189	1878 67 2122	1946 67 2054	2012 66 1988	25.5
5.0	1608 69 2392	1677 69 2323	1746 69 2254	1816 70 2184	1885 70 2115	1955 70 2045	2024 69 1976	25.0
5.5	1596 70 2404	1666 71 2334	1738 71 2262	1809 72 2191	1881 72 2119	1952 72 2048	2024 71 1976	24.5
6.0	1576 71 2424	1647 72 2353	1719 72 2281	1792 73 2208	1865 73 2135	1939 73 2061	2012 73 1988	24.0
6.5	1551 71 2449	1622 72 2378	1695 73 2305	1768 74 2232	1842 74 2158	1916 74 2084	1991 74 2009	23.5
7.0	1525 70 2475	1596 71 2404	1668 72 2332	1740 73 2260	1814 74 2186	1889 74 2111	1963 75 2037	23.0
7.5	1502 68 2498	1571 69 2429	1641 71 2359	1713 72 2287	1785 73 2215	1859 74 2141	1933 74 2067	22.5
8.0	1486 66 2514	1552 67 2448	1620 68 2380	1689 70 2311	1760 71 2240	1831 72 2169	1903 72 2097	22.0
8.5	1479 62 2521	1542 64 2458	1606 65 2394	1672 67 2328	1740 68 2260	1808 69 2192	1877 70 2123	21.5
9.0	1484 58 2516	1542 60 2458	1603 61 2397	1665 63 2335	1728 64 2272	1793 65 2207	1858 66 2142	21.0
9.5	1501 53 2499	1555 55 2445	1611 57 2389	1668 58 2332	1727 59 2273	1787 61 2213	1848 62 2152	20.5
10.0	1528 49 2472	1578 50 2422	1629 52 2371	1682 53 2318	1736 55 2264	1791 56 2209	1848 57 2152	20.0
10.5	1564 44 2436	1609 46 2391	1656 47 2344	1704 49 2296	1754 50 2246	1805 51 2195	1856 52 2144	19.5
11.0	1605 41 2395	1647 42 2353	1689 43 2311	1733 45 2267	1779 46 2221	1825 47 2175	1873 48 2127	19.0
11.5	1648 37 2352	1686 39 2314	1726 40 2274	1766 41 2234	1808 42 2192	1851 43 2149	1894 44 2106	18.5
12.0	1688 35 2312	1724 36 2276	1760 37 2240	1798 38 2202	1837 39 2163	1877 40 2123	1918 41 2082	18.0
12.5	1721 34 2279	1756 35 2244	1791 36 2209	1827 36 2173	1864 37 2136	1901 38 2099	1940 39 2060	17.5
13.0	1747 33 2253	1780 34 2220	1815 35 2185	1850 35 2150	1885 36 2115	1921 36 2079	1958 37 2042	17.0
13.5	1762 33 2238	1796 34 2204	1830 34 2170	1865 35 2135	1900 35 2100	1935 36 2065	1971 36 2029	16.5
14.0	1770 34 2230	1804 34 2196	1838 34 2162	1873 35 2127	1908 35 2092	1943 35 2057	1979 36 2021	16.0
14.5	1771 35 2229	1806 35 2194	1841 35 2159	1876 35 2124	1911 35 2089	1946 35 2053	1982 35 2018	15.5
15.0	1769 36 2231	1805 36 2195	1840 36 2160	1876 36 2124	1911 35 2089	1947 36 2053	1983 36 2017	15.0
15.5	1766 37 2234	1802 36 2198	1839 36 2161	1875 36 2125	1911 36 2089	1947 36 2053	1983 36 2017	14.5
16.0	1763 38 2237	1801 38 2199	1839 38 2161	1876 37 2124	1913 37 2087	1949 36 2051	1986 36 2014	14.0
16.5	1764 39 2236	1803 39 2197	1842 38 2158	1880 38 2120	1918 38 2082	1956 37 2044	1992 36 2008	13.5
17.0	1767 41 2233	1808 40 2192	1848 40 2152	1888 40 2112	1928 39 2072	1966 38 2034	2004 38 1996	13.0
17.5	1772 43 2228	1815 43 2185	1857 42 2143	1899 42 2101	1941 41 2059	1981 40 2019	2021 40 1979	12.5
18.0	1776 46 2224	1821 46 2179	1866 45 2134	1911 44 2089	1955 44 2045	1998 43 2002	2041 42 1959	12.0
18.5	1776 49 2224	1825 49 2175	1874 48 2126	1921 48 2079	1968 47 2032	2015 46 1985	2061 45 1939	11.5
19.0	1771 53 2229	1824 52 2176	1876 52 2124	1928 51 2072	1979 51 2021	2029 50 1971	2079 49 1921	11.0
19.5	1758 57 2242	1814 56 2186	1870 56 2130	1926 56 2074	1982 55 2018	2036 54 1964	2090 54 1910	10.5
20.0	1736 60 2264	1797 61 2203	1857 60 2143	1917 60 2083	1977 60 2023	2036 59 1964	2095 58 1905	10.0
20.5	1706 64 2294	1771 64 2229	1835 64 2165	1899 64 2101	1963 64 2037	2027 63 1973	2090 63 1910	9.5
21.0	1670 67 2330	1738 68 2262	1805 68 2195	1873 68 2127	1941 68 2059	2009 67 1991	2076 67 1924	9.0
21.5	1630 70 2370	1700 70 2300	1770 71 2230	1841 71 2159	1912 71 2088	1982 71 2018	2053 70 1947	8.5
22.0	1590 71 2410	1661 72 2339	1733 72 2267	1806 73 2194	1878 73 2122	1952 73 2048	2025 73 1975	8.0
22.5	1552 71 2448	1624 72 2376	1697 73 2303	1770 74 2230	1844 74 2156	1919 75 2081	1993 74 2007	7.5
23.0	1522 71 2478	1593 72 2407	1665 73 2335	1738 74 2262	1812 74 2188	1887 75 2113	1962 75 2038	7.0
23.5	1501 69 2499	1570 70 2430	1641 72 2359	1713 73 2287	1786 73 2214	1860 74 2140	1934 74 2066	6.5
24.0	1492 67 2508	1560 68 2440	1629 69 2371	1699 71 2301	1770 72 2230	1842 72 2158	1915 73 2085	6.0
24.5	1497 64 2503	1562 66 2438	1628 67 2372	1696 68 2304	1765 70 2235	1834 70 2166	1905 71 2095	5.5
25.0	1516 61 2484	1578 62 2422	1641 64 2359	1706 65 2294	1772 67 2228	1839 68 2161	1907 68 2093	5.0
25.5	1548 58 2452	1607 60 2393	1667 61 2333	1729 63 2271	1792 64 2208	1856 65 2144	1922 66 2078	4.5
26.0	1589 56 2411	1646 57 2354	1704 58 2296	1763 60 2237	1824 61 2176	1885 62 2115	1948 63 2052	4.0
26.5	1639 54 2361	1693 55 2307	1749 57 2251	1806 58 2194	1864 59 2136	1924 60 2076	1984 61 2016	3.5
27.0	1692 52 2308	1745 54 2255	1799 55 2201	1855 56 2145	1911 57 2089	1969 58 2031	2027 59 1973	3.0
27.5	1746 52 2254	1798 53 2202	1851 54 2149	1906 55 2094	1961 56 2039	2017 58 1983	2074 58 1926	2.5
28.0	1798 52 2202	1850 52 2150	1903 53 2097	1956 54 2044	2011 55 1989	2066 55 1934	2122 56 1878	2.0
28.5	1847 52 2153	1899 52 2101	1952 53 2048	2005 54 1995	2059 54 1941	2113 55 1887	2168 55 1832	1.5
29.0	1892 52 2108	1945 53 2055	1997 53 2003	2050 53 1950	2104 53 1896	2158 54 1842	2211 54 1789	1.0
29.5	1936 52 2064	1988 53 2012	2041 53 1959	2093 53 1907	2146 53 1854	2199 53 1801	2252 53 1748	+0.5
30.0	1978 52 2022	2030 52 1970	2083 52 1917	2135 52 1865	2187 52 1813	2239 52 1761	2291 52 1709	0.0
30.5	2021+53 1979	2074+52 1926	2126+52 1874	2178+51 1822	2229+51 1771	2280+51 1720	2330+50 1670	-0.5
Arg.	v 77	v 76	v 75	v 74	v 73	v 72	v 71	Arg.

TABLE 2.

Vert. Arg. D.

Hor. Arg. 2.

Arg.	0 v	2 v	4 v	6 v	8 v	10 v	12 v	14 v	Arg.
d									d
-0.5	435 0	435 0 565	435 0 565	436 0 564	437 + 1 563	438 + 1 562	440 + 1 560	442 + 1 558	30.5
0.0	460 + 1	463 + 2 537	466 + 2 534	470 + 2 530	473 2 527	477 2 523	480 2 520	484 2 516	30.0
+0.5	498 2	502 2 498	507 2 493	511 2 489	515 2 485	519 2 481	522 2 478	526 2 474	29.5
1.0	545 2	549 2 451	553 + 2 447	556 + 2 444	559 + 1 441	561 + 1 439	563 + 1 437	565 + 1 435	29.0
1.5	599 + 1	601 + 1 399	602 0 398	602 0 398	602 0 398	601 - 1 399	600 - 1 400	598 - 1 402	28.5
2.0	654 0	653 - 1 347	650 - 2 350	647 - 2 353	643 - 2 357	637 3 363	631 3 369	624 4 376	28.0
2.5	708 - 2	703 3 297	696 4 304	688 4 312	678 5 322	668 6 332	656 6 344	643 7 357	27.5
3.0	756 4	746 5 254	735 6 265	722 7 278	707 8 293	692 8 308	674 9 326	656 9 344	27.0
3.5	795 6	782 7 218	766 8 234	748 9 252	730 10 270	709 11 291	687 11 313	664 12 336	26.5
4.0	824 8	807 9 193	788 10 212	767 11 233	745 12 255	721 12 279	695 13 305	668 14 332	26.0
4.5	841 9	822 10 178	801 11 199	779 12 221	754 13 246	728 13 272	700 14 300	672 15 328	25.5
5.0	847 9	828 10 172	807 11 193	784 12 216	760 13 240	733 14 267	705 14 295	676 15 324	25.0
5.5	843 8	826 9 174	807 10 193	785 11 215	762 12 238	737 13 263	710 14 290	682 14 318	24.5
6.0	832 7	818 8 18							

TABLE 2 (cont.).

Vert. Arg. D.

Hor. Arg. 2.

Arg.	16 v	18 v	20 v	22 v	24 v	26 v	28 v	30 v	Arg.
d									d
-0.5	444 + 1 556	447 + 2 553	451 + 2 549	454 + 2 546	458 + 2 542	463 + 2 537	468 + 2 532	473 + 3 527	30.5
0.0	488 2 512	492 2 508	496 2 504	501 2 499	505 2 495	510 2 490	514 2 486	518 2 482	30.0
+0.5	530 + 2 470	533 + 2 467	536 + 2 464	539 + 1 461	542 + 1 458	544 + 1 456	547 + 1 453	549 + 1 451	29.5
1.0	566 0 434	566 0 434	567 0 433	567 0 433	566 0 434	566 0 434	565 - 1 435	563 - 1 437	29.0
1.5	595 - 2 405	591 - 2 409	587 - 2 413	583 - 2 417	578 - 3 422	572 - 3 428	567 3 433	561 3 439	28.5
2.0	616 4 384	607 4 393	598 5 402	588 5 412	578 5 422	567 6 433	556 6 444	544 6 456	28.0
2.5	630 7 370	615 7 385	600 8 400	584 8 416	568 8 432	551 8 449	534 8 466	517 9 483	27.5
3.0	637 10 363	617 10 383	596 11 404	575 11 425	553 11 447	531 11 469	508 11 492	486 11 514	27.0
3.5	640 12 360	615 13 385	589 13 411	563 13 437	536 13 464	509 13 491	482 13 518	456 13 544	26.5
4.0	640 14 360	612 15 388	582 15 418	552 15 448	522 15 478	491 15 509	461 15 539	431 15 569	26.0
4.5	641 15 359	610 16 390	579 16 421	547 16 453	514 16 486	482 16 518	450 16 550	418 16 582	25.5
5.0	645 15 355	614 16 386	582 16 418	549 16 451	516 16 484	483 16 517	450 16 550	418 16 582	25.0
5.5	653 15 347	623 15 377	592 15 408	561 16 439	529 16 471	497 16 503	465 16 535	433 16 567	24.5
6.0	666 13 334	639 14 361	611 14 389	582 15 419	553 15 447	523 15 477	494 15 506	464 15 536	24.0
6.5	685 13 315	662 12 338	638 12 362	613 13 387	587 13 413	561 13 439	535 13 465	508 13 492	23.5
7.0	708 9 292	691 9 309	672 10 328	651 10 349	630 11 370	608 11 392	585 12 415	562 12 438	23.0
7.5	736 6 264	724 6 276	710 7 290	695 8 305	679 8 321	661 9 339	643 9 357	623 10 377	22.5
8.0	765 - 3 235	758 4 242	750 4 250	740 5 260	729 6 271	716 7 284	702 7 298	687 8 313	22.0
8.5	793 0 207	792 - 1 208	789 - 2 211	784 3 216	778 4 222	769 5 231	759 5 241	748 6 252	21.5
9.0	817 + 2 183	821 + 1 179	823 0 177	823 - 1 177	820 - 2 180	816 3 184	809 4 191	801 5 199	21.0
9.5	836 4 164	844 3 156	849 + 2 151	852 + 1 148	853 0 147	852 - 1 148	848 2 152	842 3 158	20.5
10.0	847 6 153	857 4 143	865 3 135	870 2 130	873 + 1 127	874 0 126	872 1 128	868 3 132	20.0
10.5	846 6 154	858 5 142	866 4 134	873 3 127	877 2 123	879 0 121	879 1 121	876 2 124	19.5
11.0	834 6 166	845 5 155	854 4 146	860 3 140	864 2 136	866 0 134	866 1 134	863 2 137	19.0
11.5	808 5 192	818 4 182	826 3 174	831 2 169	834 + 1 166	836 0 164	835 1 165	832 2 168	18.5
12.0	771 4 229	778 3 222	784 2 216	788 + 1 212	789 0 211	790 0 210	788 1 212	784 2 216	18.0
12.5	724 2 276	729 + 2 271	732 + 1 268	733 0 267	732 - 1 268	729 2 271	725 2 275	725 2 275	17.5
13.0	671 + 1 329	672 0 328	673 0 327	672 - 1 328	670 - 1 330	668 2 332	664 2 336	660 3 340	17.0
13.5	615 0 385	614 - 1 386	613 - 1 387	610 1 390	608 2 392	604 2 396	600 2 400	595 2 405	16.5
14.0	562 - 1 438	560 1 440	557 1 443	554 2 446	550 2 450	547 2 453	543 2 457	539 2 461	16.0
14.5	516 1 484	513 1 487	510 1 490	508 1 492	505 - 1 495	502 - 1 498	500 - 1 500	498 - 1 502	15.5
15.0	481 - 1 519	479 - 1 521	478 - 1 522	477 - 1 523	476 0 524	475 0 525	475 0 525	475 0 525	15.0
15.5	459 0 541	460 + 1 540	461 + 1 539	463 + 1 537	465 + 1 535	467 + 1 533	470 + 1 530	472 + 1 528	14.5
16.0	452 + 2 548	456 2 544	461 3 539	466 3 534	472 3 528	478 3 522	484 3 516	490 3 510	14.0
16.5	457 4 543	466 5 534	476 5 524	485 5 515	495 5 505	505 5 495	515 5 485	526 5 474	13.5
17.0	473 7 527	487 7 513	501 7 499	516 7 484	530 7 470	544 7 456	558 7 442	572 7 428	13.0
17.5	495 9 505	514 9 486	533 9 467	552 9 448	570 9 430	588 9 412	606 9 394	623 8 377	12.5
18.0	518 12 482	542 12 458	565 11 435	588 11 412	610 11 390	632 11 368	652 10 348	672 10 328	12.0
18.5	538 13 462	564 13 436	591 13 409	617 13 383	642 12 358	666 12 334	690 11 310	712 11 288	11.5
19.0	549 15 451	578 14 422	607 14 393	635 14 365	662 13 338	688 13 312	713 12 287	737 11 263	11.0
19.5	549 15 451	580 15 420	609 15 391	638 14 362	666 14 334	694 13 306	719 13 281	744 12 256	10.5
20.0	536 15 464	566 15 434	596 15 404	624 14 376	652 14 348	680 13 320	706 13 294	730 12 270	10.0
20.5	509 14 491	537 14 463	566 14 434	593 14 407	620 13 380	647 13 353	672 12 328	697 12 303	9.5
21.0	469 13 531	495 13 505	521 13 479	547 13 453	573 13 427	598 12 402	622 12 378	646 12 354	9.0
21.5	418 11 582	441 12 559	464 12 536	488 12 512	511 12 489	535 12 465	558 12 442	581 11 419	8.5
22.0	360 9 640	379 10 621	399 10 601	420 11 580	441 11 559	463 11 537	485 11 515	507 11 493	8.0
22.5	298 8 702	314 8 686	330 9 670	348 9 652	367 10 633	387 10 613	408 11 592	429 11 571	7.5
23.0	237 6 763	249 7 751	263 7 737	278 8 722	295 9 705	313 9 687	333 10 667	353 10 647	7.0
23.5	182 4 818	191 5 809	202 6 798	215 7 785	230 8 770	247 9 753	265 10 735	285 10 715	6.5
24.0	136 3 864	143 4 857	152 5 848	164 6 836	177 7 823	193 8 807	210 9 790	230 10 770	6.0
24.5	105 2 895	111 3 889	118 4 882	128 5 872	141 6 859	156 7 844	173 8 827	192 9 808	5.5
25.0	92 1 908	96 3 904	103 4 897	113 5 887	125 6 875	139 7 861	156 8 844	175 9 825	5.0
25.5	99 1 901	103 3 897	110 4 890	119 5 881	131 6 869	145 7 855	162 8 838	180 9 820	4.5
26.0	125 2 875	130 3 870	137 4 863	146 5 854	158 6 842	172 7 828	188 8 812	207 9 793	4.0
26.5	170 2 830	176 3 824	184 4 816	194 5 806	206 6 794	219 7 781	235 8 765	252 9 748	3.5
27.0	231 3 769	237 4 763	246 5 754	256 6 744	267 7 733	281 8 719	295 9 705	311 10 689	3.0
27.5	300 3 700	308 4 692	316 5 684	326 6 674	338 7 662	350 8 650	363 9 637	377 10 623	2.5
28.0	373 4 627	381 4 619	389 5 611	399 5 601	409 5 591	420 6 580	431 6 569	443 6 557	2.0
28.5	441 4 559	448 4 552	456 4 544	464 4 536	473 4 527	482 4 518	490 4 510	499 4 501	1.5
29.0	498 3 502	504 3 496	510 3 490	516 3 484	523 3 477	529 3 471	535 3 465	540 3 460	1.0
29.5	537 2 493	541 + 2 459	545 + 2 455	549 + 2 451	552 + 2 448	555 + 1 445	558 + 1 442	560 + 1 440	+0.5
30.0	556 + 1 444	557 0 443	558 0 442	558 0 442	558 0 442	558 0 442	557 0 443	556 - 1 444	0.0
30.5	553 - 1 447	550 - 1 450	547 - 2 453	544 - 2 456	540 - 2 460	537 - 2 463	532 - 2 468	528 - 2 472	-0.5
Arg.	v 140	v 138	v 136	v 134	v 132	v 130	v 128	v 126	Arg.

TABLE 2 (cont.).

Vert. Arg. D.

Hor. Arg. 2.

Arg.	32 v	34 v	36 v	38 v	40 v	42 v	44 v	46 v	Arg.
d									d
-0.5	478 + 3 522	484 + 3 516	489 + 3 511	495 + 3 505	501 + 3 499	507 + 3 493	514 + 3 486	520 + 3 480	30.5
0.0	523 2 477	527 2 473	531 2 469	536 2 464	540 + 2 460	543 + 2 457	547 + 2 453	550 + 2 450	30.0
+0.5	551 + 1 449	553 + 1 447	554 + 1 446	556 + 1 444	557 0 443	557 0 443	558 0 442	558 0 442	29.5
1.0	562 - 1 438	560 - 1 440	557 - 1 443	555 - 1 445	552 - 2 448	549 - 2 451	545 - 2 455	542 - 2 458	29.0
1.5	554 3 446	548 3 452	541 3 459	534 4 466	526 4 474	519 4 481	512 4 488	504 4 496	28.5
2.0	532 6 468	520 6 480	509 6 491	497 6 503	485 6 515	474 6 526	462 6 538	451 5 549	28.0
2.5	500 8 500	483 8 517	466 8 534	450 8 550	434 8 566	418 8 582	403 7 597	389 7 611	27.5
3.0	464 11 536	442 11 558	421 11 579	400 10 600	380 10 620	361 9 639	343 9 657	325 8 675	27.0
3.5	429 13 571	403 13 597	378 12 622	354 12 646	331 11 669	308 11 692	288 10 712	268 9 732	26.5
4.0	402 15 598	373 14 627	345 14 655	318 13 682	292 12 708	268 12 732	246 11 754	224 10 776	26.0
4.5	386 16 614	356 15 644	326 14 674	298 14 702	271 13 729	245 12 755	221 12 779	199 10 801	25.5
5.0	386 16 614	355 15 645	325 15 675	296 14 704	268 13 732	242 13 758	218 12 782	195 11 805	25.0
5.5	402 15 598	372 15 628	342 15 658	313 14 687	286 13 714	260 13 740	235 12 765	212 11 788	24.5
6.0	434 15 566	405 14 595	377 14 623	349 14 651	3				

TABLE 2 (cont.).

Vert. Arg. D.

Hor. Arg. 2.

Arg.	48 v	50 v	52 v	54 v	56 v	58 v	60 v	62 v	Arg.
d									d
-0.5	526 + 3 474	532 + 3 468	537 + 3 463	543 + 3 457	548 + 2 452	552 + 2 448	557 + 2 443	561 + 2 439	30.5
0.0	554 + 1 446	556 + 1 444	559 + 1 441	561 + 1 439	562 + 1 438	563 0 437	564 0 436	564 0 436	30.0
+0.5	558 0 442	557 0 443	556 - 1 444	555 - 1 445	553 - 1 447	551 - 1 449	548 - 1 452	545 - 2 455	29.5
1.0	538 - 2 462	534 - 2 466	530 2 470	525 2 475	520 2 480	516 2 484	511 3 489	506 3 494	29.0
1.5	497 4 503	490 4 510	482 4 518	475 4 525	468 3 532	462 3 538	455 3 545	448 3 552	28.5
2.0	441 5 559	430 5 570	421 5 579	411 4 589	403 4 597	394 4 606	387 4 613	380 3 620	28.0
2.5	375 7 625	363 6 637	351 6 649	340 5 660	330 5 670	321 4 679	313 4 687	307 3 693	27.5
3.0	309 8 691	294 7 706	281 6 719	269 6 731	259 5 741	250 4 750	242 3 758	236 2 764	27.0
3.5	250 9 750	234 8 766	220 7 780	207 6 793	196 5 804	187 4 813	180 3 820	176 2 824	26.5
4.0	205 9 795	188 8 812	173 7 827	160 6 840	148 5 852	140 4 860	134 3 866	129 1 871	26.0
4.5	179 10 821	161 8 839	145 7 855	132 6 868	121 5 879	112 4 888	106 2 894	102 1 898	25.5
5.0	174 10 826	156 9 844	140 8 860	126 6 874	114 5 886	105 4 895	99 3 901	95 1 905	25.0
5.5	192 10 808	173 9 827	156 8 844	142 7 858	129 5 871	120 4 880	112 3 888	107 2 893	24.5
6.0	229 10 771	210 9 790	193 8 807	177 7 823	164 6 836	153 5 847	144 4 856	138 3 862	24.0
6.5	285 10 715	265 9 735	247 8 753	230 7 770	215 6 785	202 5 798	191 4 809	182 3 818	23.5
7.0	353 10 647	333 10 667	313 9 687	295 8 705	278 7 722	263 6 737	249 5 751	237 4 763	23.0
7.5	429 11 571	408 10 592	388 10 612	368 10 632	349 9 651	331 8 669	314 7 686	298 6 702	22.5
8.0	507 11 493	486 11 514	464 11 536	442 11 558	420 11 580	400 10 600	380 10 620	360 9 640	22.0
8.5	582 11 418	559 12 441	536 12 464	512 12 488	489 12 511	465 12 535	442 12 558	419 11 581	21.5
9.0	647 12 353	624 12 376	599 12 401	574 13 426	548 13 452	522 13 478	496 13 504	470 13 530	21.0
9.5	698 12 302	674 13 326	649 13 351	623 13 377	596 14 404	568 14 432	540 14 460	511 14 489	20.5
10.0	732 12 268	708 13 292	682 13 318	655 14 345	627 14 373	598 15 402	569 15 431	539 15 461	20.0
10.5	746 12 254	722 12 278	697 13 303	670 14 330	642 14 358	613 15 387	584 15 416	553 15 447	19.5
11.0	740 11 260	717 12 283	693 13 307	667 13 333	640 14 360	612 14 388	583 14 417	554 15 446	19.0
11.5	716 10 284	694 11 306	672 12 328	648 12 352	623 13 377	597 13 403	570 13 430	544 14 456	18.5
12.0	677 9 323	658 10 342	638 10 362	616 11 384	594 11 406	572 11 428	549 12 451	525 12 475	18.0
12.5	628 8 372	612 8 388	595 9 405	578 9 422	559 9 441	541 9 459	522 10 498	502 10 498	17.5
13.0	578 6 422	565 6 435	552 7 448	538 7 462	524 7 476	510 7 490	496 7 504	482 7 518	17.0
13.5	532 4 468	523 4 477	514 5 486	504 5 496	495 5 505	485 5 515	476 5 524	466 5 534	16.5
14.0	497 3 503	492 3 508	487 3 513	482 3 518	476 3 524	471 2 529	466 2 534	461 2 539	16.0
14.5	479 - 1 521	478 - 1 522	476 - 1 524	474 - 1 526	473 - 1 527	472 - 1 528	470 - 1 530	469 - 1 531	15.5
15.0	482 + 1 518	483 + 1 517	484 + 1 516	486 + 1 514	487 + 1 513	488 + 1 512	490 + 1 510	491 + 1 509	15.0
15.5	504 2 496	508 2 492	512 2 488	515 2 485	518 2 482	521 1 479	524 1 476	526 1 474	14.5
16.0	546 3 454	551 2 449	556 2 444	560 2 440	564 2 436	567 2 433	570 1 430	572 + 1 428	14.0
16.5	602 3 398	608 3 392	612 2 388	617 2 383	620 1 380	622 + 1 378	624 + 1 376	624 0 376	13.5
17.0	665 3 335	671 3 329	675 2 325	679 1 321	681 - 1 319	681 - 1 319	679 - 1 321	679 - 1 321	13.0
17.5	730 3 270	735 2 265	739 1 261	741 + 1 259	741 0 259	740 - 1 260	737 2 263	732 3 268	12.5
18.0	789 3 211	793 2 207	796 + 1 204	796 0 204	794 - 1 206	791 2 209	785 3 215	778 4 222	12.0
18.5	836 2 164	840 1 160	841 0 159	840 - 1 160	837 2 163	832 3 168	824 4 176	814 5 186	11.5
19.0	866 2 134	870 1 130	871 0 129	869 1 131	865 3 135	859 4 141	850 5 150	839 6 161	11.0
19.5	878 2 122	881 1 119	882 0 118	881 1 119	877 3 123	870 4 130	862 5 138	850 6 150	10.5
20.0	870 3 130	874 2 126	877 0 123	876 - 1 124	873 2 127	868 3 132	860 5 140	850 6 150	10.0
20.5	844 4 156	850 3 150	854 + 1 146	855 0 145	854 - 1 146	851 - 2 149	846 3 154	838 4 162	9.5
21.0	802 5 198	810 4 190	817 3 183	822 + 2 178	824 + 1 176	824 0 176	823 - 1 177	819 - 2 181	9.0
21.5	748 6 252	760 5 240	770 4 230	778 4 222	785 3 215	790 + 2 210	793 + 1 207	794 0 206	8.5
22.0	687 8 313	702 7 298	717 7 283	729 6 271	741 5 259	750 4 250	758 4 242	765 + 3 235	8.0
22.5	624 10 376	643 9 357	662 9 338	679 8 321	695 8 305	710 7 290	724 6 276	736 6 264	7.5
23.0	563 12 437	586 12 414	609 11 391	631 11 369	652 10 348	672 10 328	691 9 309	709 9 291	7.0
23.5	509 13 491	536 13 464	562 13 438	588 13 412	614 13 386	638 12 362	662 12 338	685 11 315	6.5
24.0	466 15 534	495 15 505	525 15 475	554 15 446	584 14 416	612 14 388	640 14 360	667 13 333	6.0
24.5	436 16 564	468 16 532	500 16 500	531 16 469	563 16 437	594 15 406	624 15 376	654 15 346	5.5
25.0	421 16 579	454 16 546	486 16 514	519 16 481	552 16 448	584 16 416	615 16 385	646 15 354	5.0
25.5	422 16 578	454 16 546	486 16 514	519 16 481	550 16 450	581 16 419	612 15 388	643 15 357	4.5
26.0	437 15 563	466 15 534	496 15 504	526 15 474	556 15 444	585 14 415	614 14 386	642 14 358	4.0
26.5	402 13 538	488 13 512	515 13 485	541 13 459	567 13 433	593 13 407	618 12 382	642 12 358	3.5
27.0	494 11 506	516 11 484	537 11 463	559 11 441	580 10 420	600 10 400	620 10 380	639 9 361	3.0
27.5	526 8 474	543 8 457	559 8 441	575 8 425	590 8 410	605 7 395	619 7 381	632 6 368	2.5
28.0	553 6 447	564 5 436	575 5 425	585 5 415	595 5 405	603 4 397	612 4 388	619 3 381	2.0
28.5	570 3 430	576 + 3 424	581 + 2 419	586 + 2 414	590 + 2 410	593 + 2 407	596 + 1 404	598 + 1 402	1.5
29.0	573 + 1 427	574 0 426	575 0 425	575 0 425	574 0 426	573 - 1 427	571 - 1 429	569 - 1 431	1.0
29.5	560 - 1 440	557 - 1 443	554 - 2 446	550 - 2 450	547 - 2 453	542 - 2 458	538 2 462	533 2 467	+0.5
30.0	528 2 472	524 2 476	519 3 481	514 3 486	508 3 492	503 3 497	497 3 503	492 3 508	0.0
30.5	483 - 3 517	477 - 3 523	472 - 3 528	467 - 3 533	461 - 2 539	457 - 2 543	452 - 2 548	447 - 2 553	-0.5
Arg.	v 108	v 106	v 104	v 102	v 100	v 98	v 96	v 94	Arg.

TABLE 2 (concl.).

Vert. Arg. D.

Hor. Arg. 2.

Arg.	64 v	66 v	68 v	70 v	72 v	74 v	76 v	78 v	Arg.
d									d
-0.5	564 + 2 436	567 + 1 433	570 + 1 430	572 + 1 428	573 + 1 427	574 0 426	574 0 426	574 0	30.5
0.0	564 0 436	563 0 437	562 - 1 438	560 - 1 440	558 - 1 442	555 - 1 445	552 - 2 448	548 - 2	30.0
+0.5	542 - 2 458	539 - 2 461	535 2 465	530 2 470	526 2 474	521 2 479	516 3 484	511 3	29.5
1.0	500 3 500	495 3 505	490 3 510	484 3 516	479 3 521	473 3 527	468 3 532	463 3	29.0
1.5	442 3 558	436 3 564	431 3 569	426 2 574	421 2 579	417 2 583	412 - 2 588	409 - 2	28.5
2.0	374 3 626	368 2 632	364 2 636	360 - 2 640	357 - 1 643	355 - 1 645	354 0 646	353 0	28.0
2.5	302 2 698	297 2 703	294 - 1 706	293 0 707	292 0 708	293 + 1 707	295 + 1 705	299 + 2	27.5
3.0	232 2 768	230 - 1 770	229 0 771	230 + 1 770	232 + 2 768	237 3 763	242 3 758	250 4	27.0
3.5	173 - 1 827	172 0 828	173 + 1 827	177 2 823	182 3 818	190 4 810	199 5 801	210 6	26.5
4.0	128 0 872	128 + 1 872	132 2 868	137 3 863	144 4 856	155 6 845	167 7 833	181 8	26.0
4.5	101 0 899	103 1 897	107 3 893	113 4 887	122 5 878	134 6 866	147 7 853	163 8	25.5
5.0	94 0 906	95 1 905	99 3 901	105 4 895	114 5 886	126 6 874	140 8 860	156 9	25.0
5.5	105 - 1 895	105 + 1 895	108 2 892	113 3 887	121 4 879	131 6 869	144 7 856	159 8	24.5
6.0	133 2 867	131 0 869	132 + 1 868	135 + 2 865	140 3 860	148 4 852	157 5 843	169 7	24.0
6.5	175 3 82								

TABLE 3.

Vert. Arg. D.

Hor. Arg. 3.

Arg.	0 v	2 v	4 v	6 v	8 v	10 v	12 v	14 v	Arg.
d									d
-0.5	368 + 2	372 + 2 228	376 + 1 224	378 + 1 222	380 + 1 220	380 0 220	381 0 219	380 0 220	30.5
0.0	322 3	328 3 272	334 3 266	340 3 260	345 3 255	350 + 2 250	355 + 2 245	359 + 2 241	30.0
+0.5	272 3	278 3 322	285 3 315	292 3 308	299 4 301	306 4 294	314 4 286	321 4 279	29.5
1.0	226 + 2	230 + 2 370	235 3 365	241 3 359	247 3 353	254 4 346	262 4 338	270 4 330	29.0
1.5	191 0	191 0 409	192 + 1 408	194 + 1 406	198 + 2 402	202 3 398	208 3 392	216 4 384	28.5
2.0	171 - 3	165 - 3 435	161 - 2 439	158 - 1 442	156 0 444	157 + 1 443	159 + 2 441	163 + 2 437	28.0
2.5	168 7	156 6 444	145 5 455	136 4 464	128 - 3 472	123 - 2 477	120 - 1 480	119 0 481	27.5
3.0	181 10	163 9 437	146 8 454	130 7 470	117 6 483	106 5 494	97 4 503	90 - 3 510	27.0
3.5	210 12	186 12 414	163 11 437	142 10 458	123 9 477	106 8 494	91 7 509	78 6 522	26.5
4.0	248 14	220 14 380	194 13 406	168 12 432	144 12 456	122 11 478	102 9 498	84 8 516	26.0
4.5	292 15	263 15 337	234 14 366	206 14 394	179 13 421	153 12 447	129 12 471	107 10 493	25.5
5.0	338 14	309 15 291	280 15 320	251 14 349	222 14 378	195 13 405	168 13 432	144 12 456	25.0
5.5	382 13	355 14 245	327 14 273	299 14 301	271 14 329	244 14 356	217 13 383	191 13 409	4.5
6.0	420 11	396 12 204	372 12 228	347 13 253	322 13 278	296 13 304	270 13 330	245 13 355	24.0
6.5	449 8	431 9 169	412 10 188	391 11 209	370 11 230	347 11 253	324 11 276	301 12 299	23.5
7.0	468 5	456 6 144	443 7 157	429 8 171	412 8 188	395 9 205	376 10 224	357 10 243	23.0
7.5	476 - 2	471 - 3 129	465 - 4 135	457 4 143	448 5 152	436 6 164	423 7 177	408 8 192	22.5
8.0	472 + 2	475 + 1 125	476 0 124	475 - 1 125	472 - 2 128	467 - 3 133	460 4 140	452 5 148	22.0
8.5	456 6	466 5 134	475 + 4 125	481 + 3 119	486 + 2 114	488 0 112	485 - 1 112	485 - 2 115	21.5
9.0	430 9	446 8 154	462 7 138	475 6 125	486 5 114	495 + 4 105	502 + 3 98	506 + 2 94	21.0
9.5	394 11	416 11 184	437 10 163	456 9 144	474 8 126	489 7 111	502 6 98	513 5 87	20.5
10.0	351 13	377 13 223	402 12 198	426 12 174	448 11 152	469 10 131	488 9 112	504 8 96	20.0
10.5	304 14	332 14 268	359 14 241	386 13 214	412 13 188	436 12 164	459 11 141	480 10 120	19.5
11.0	257 14	285 14 315	312 14 288	340 14 260	368 13 232	394 13 206	419 12 181	443 12 157	19.0
11.5	214 12	240 13 360	266 13 334	292 13 308	319 13 281	345 13 255	371 13 229	396 12 204	18.5
12.0	181 10	202 11 398	224 11 376	247 12 353	271 12 329	295 12 305	320 12 280	344 12 256	18.0
12.5	162 7	177 8 423	193 9 407	211 9 389	230 10 370	251 10 349	271 11 329	293 11 307	17.5
13.0	158 4	167 5 433	177 5 423	189 6 411	202 7 398	217 8 383	232 8 368	249 8 351	17.0
13.5	173 + 1	175 + 1 425	179 + 2 421	184 + 3 416	191 4 409	199 4 401	208 5 392	219 6 381	16.5
14.0	205 - 2	201 - 1 399	199 - 1 401	198 0 402	198 + 1 402	200 + 1 400	203 + 2 397	208 + 3 392	16.0
14.5	249 4	242 4 358	235 3 365	229 - 3 371	224 - 2 376	220 - 2 380	218 - 1 382	216 0 384	15.5
15.0	300 4	291 4 309	282 4 318	273 4 327	265 4 335	258 4 342	251 3 349	245 - 3 355	15.0
15.5	351 4	343 4 257	334 4 266	325 5 275	316 5 284	307 5 293	298 4 302	289 4 311	14.5
16.0	395 - 2	390 - 3 210	385 3 215	378 4 222	370 4 230	362 4 238	352 5 248	343 5 257	14.0
16.5	427 + 1	427 0 173	426 - 1 174	423 - 2 177	419 - 2 181	414 3 186	407 4 193	399 4 201	13.5
17.0	442 4	448 + 3 152	453 + 2 147	456 + 1 144	457 0 143	457 - 1 143	454 - 2 146	450 - 2 150	13.0
17.5	438 7	452 6 148	463 5 137	473 4 127	480 + 3 120	485 + 2 115	489 + 1 111	490 0 110	12.5
18.0	419 10	438 9 162	456 8 144	472 7 128	485 6 115	497 5 103	506 4 94	513 + 3 87	12.0
18.5	386 12	410 12 190	432 11 168	454 10 146	473 9 127	490 8 110	505 7 95	517 6 83	11.5
19.0	343 14	370 13 230	396 13 204	421 12 179	445 11 155	466 10 134	486 9 114	504 8 96	11.0
19.5	296 14	324 14 276	351 14 249	378 13 222	404 13 196	429 12 171	452 11 148	474 10 126	10.5
20.0	249 13	276 13 324	302 13 298	329 13 271	356 13 244	382 13 218	407 12 193	430 11 170	10.0
20.5	206 11	229 12 371	254 12 346	278 12 322	303 12 297	328 12 272	353 12 247	377 12 223	9.5
21.0	170 9	189 10 411	208 10 392	229 11 371	251 11 349	274 11 326	296 11 304	319 11 281	9.0
21.5	144 6	156 7 444	170 7 430	186 8 414	203 9 397	221 9 379	240 10 360	260 10 340	8.5
22.0	128 + 2	134 + 3 466	141 4 459	150 5 450	161 6 439	174 7 426	188 7 412	204 8 396	8.0
22.5	124 - 2	122 0 478	122 + 1 478	125 + 2 475	129 + 3 471	135 + 4 465	144 5 456	154 5 446	7.5
23.0	132 5	123 - 4 477	116 - 3 484	111 - 2 489	108 - 1 492	107 0 493	109 + 1 491	113 + 3 487	7.0
23.5	151 8	135 8 465	121 7 479	109 5 491	99 4 501	92 - 3 508	87 - 2 513	84 - 1 516	6.5
24.0	180 11	159 10 441	138 10 462	120 9 480	104 8 496	90 6 510	79 5 521	70 4 530	6.0
24.5	218 13	192 13 408	167 12 433	144 11 456	122 10 478	103 9 497	86 8 514	71 7 529	5.5
25.0	262 14	233 14 367	205 14 395	178 13 422	153 12 447	129 11 471	107 10 493	88 9 512	5.0
25.5	308 15	278 15 322	249 14 351	221 14 379	193 14 407	167 13 433	142 12 458	119 11 481	4.5
26.0	352 14	324 14 276	296 14 304	268 14 332	240 14 360	213 13 387	187 13 413	162 12 438	4.0
26.5	390 12	366 13 234	340 13 260	314 13 286	288 13 312	263 13 337	237 12 363	213 12 387	3.5
27.0	419 10	399 10 201	378 11 222	356 11 244	334 11 266	311 11 289	289 11 311	266 11 334	3.0
27.5	432 7	418 7 182	403 8 197	387 8 213	370 9 230	352 9 248	334 9 266	316 9 284	2.5
28.0	429 - 3	421 4 179	413 5 187	403 5 197	392 6 208	380 6 220	368 6 232	354 7 246	2.0
28.5	409 0	407 - 1 193	405 - 2 195	401 - 2 199	396 - 3 204	391 - 3 209	384 - 3 216	377 4 223	1.5
29.0	374 + 2	377 + 1 223	379 + 1 221	381 + 1 219	382 0 218	382 0 218	382 0 218	380 - 1 220	1.0
29.5	328 3	334 3 266	340 3 260	345 3 255	350 + 2 250	355 + 2 245	359 + 2 241	363 + 2 237	+0.5
30.0	278 3	285 3 315	291 3 309	298 4 302	305 4 295	313 4 287	320 4 280	327 4 273	0.0
30.5	232 + 2	236 + 3 364	242 + 3 358	248 + 3 352	254 + 4 346	262 + 4 338	270 + 4 330	279 + 4 321	-0.5
Arg.		v 114	v 112	v 110	v 108	v 106	v 104	v 102	Arg.

TABLE 3 (cont.).

Vert. Arg. D.

Hor. Arg. 3.

Arg.	16 v	18 v	20 v	22 v	24 v	26 v	28 v	30 v	Arg.
d									d
-0.5	379 - 1 221	377 - 1 223	374 - 2 226	371 - 2 229	367 - 2 233	362 - 3 238	356 - 3 244	350 - 3 250	30.5
0.0	363 + 2 237	366 + 2 234	369 + 1 231	371 + 1 229	373 + 1 227	373 0 227	373 0 227	372 - 1 228	30.0
+0.5	328 4 272	336 4 264	343 3 257	350 3 250	356 3 244	362 + 3 238	367 + 2 233	372 + 2 228	29.5
1.0	280 5 320	289 5 311	299 5 301	309 5 291	319 5 281	329 5 271	339 5 261	348 5 252	29.0
1.5	224 4 376	233 5 367	244 5 356	255 6 345	267 6 333	280 6 320	293 7 307	306 7 294	28.5
2.0	168 3 432	176 4 424	185 5 415	195 6 405	207 6 393	220 7 380	235 7 365	250 8 350	28.0
2.5	121 + 1 479	124 + 2 476	130 3 470	138 4 462	148 5 452	159 6 441	173 7 427	188 8 412	27.5
3.0	86 - 1 514	84 0 516	86 + 1 514	89 + 2 511	95 4 505	104 5 496	116 6 484	129 7 471	27.0
3.5	68 4 532	61 - 3 539	57 - 1 543	56 0 544	57 + 2 543	62 3 538	69 4 531	79 6 521	26.5
4.0	69 7 531	56 6 544	47 4 553	40 - 3 560	36 - 1 564	36 + 1 564	39 + 2 561	44 4 556	26.0
4.5	87 9 513	70 8 530	55 7 545	43 5 557	35 4 565	29 - 2 571	27 0 573	28 + 1 572	25.5
5.0	121 11 479	100 10 500	81 9 519	65 7 535	52 6 548	42 4 558	34 - 3 566	30 - 1 570	25.0
5.5	166 12 434	143 11 457	122 10 478	103 9 497	86 8 514	72 6 528	60 5 540	51 4 549	24.5
6.0	220 12 380	196 12 404	174 11 426	153 10 447	134 9 466	116 8 484	101 7 499	88 6 512	24.0
6.5	278 11 322	256 11 344	233 11 367	212 10 388	191 10 409	172 9 428	155 8 445	139 8 461	23.5
7.0	337 10 263	316 10 284	296 10 304	276 1					

TABLE 3 (cont.).

Vert. Arg. D.

Hor. Arg. 3.

Table with 10 columns: Arg., 32 v, 34 v, 36 v, 38 v, 40 v, 42 v, 44 v, 46 v, Arg. and 10 rows of numerical data.

TABLE 3 (concl.).

Vert. Arg. D.

Hor. Arg. 3.

Table with 10 columns: Arg., 48 v, 50 v, 52 v, 54 v, 56 v, 58 v, Arg. and 10 rows of numerical data.

TABLE 4.

Vert. Arg. D.

Hor. Arg. 4.

Arg.	0 v	2 v 64	4 v 66	6 v 68	8 v 70	10 v 72	12 v 74	14 v 76	Arg.
d									d
-0.5	421 - 7	406 - 8 94	390 - 9 110	372 - 9 128	352 - 10 148	332 - 10 168	311 - 11 189	290 - 11 210	30.5
0.0	407 8	389 9 111	370 10 130	350 10 150	329 11 171	308 11 192	285 11 215	262 11 238	30.0
+0.5	385 9	366 10 134	345 10 155	324 11 176	302 11 198	280 11 220	257 11 243	234 11 266	29.5
1.0	357 10	337 10 163	317 11 183	295 11 205	273 11 227	251 11 249	229 11 271	207 11 293	29.0
1.5	327 10	307 10 193	287 10 213	266 10 234	245 10 255	224 10 276	204 10 296	184 10 316	28.5
2.0	296 9	277 9 223	258 9 242	239 9 261	220 9 280	202 9 298	184 9 316	166 8 334	28.0
2.5	267 8	250 8 250	233 8 267	217 8 283	200 8 300	185 8 315	170 7 330	156 7 344	27.5
3.0	242 7	227 7 273	213 7 287	200 7 300	187 6 313	174 6 326	162 6 338	152 5 348	27.0
3.5	222 6	211 6 289	200 5 300	189 5 311	179 5 321	170 4 330	162 4 338	154 4 346	26.5
4.0	209 4	200 4 300	192 4 308	184 4 316	178 3 322	171 3 329	166 2 334	162 2 338	26.0
4.5	201 3	195 3 305	190 2 310	185 2 315	181 2 319	178 - 1 322	175 - 1 325	173 - 1 327	25.5
5.0	198 2	195 - 2 305	192 - 1 308	190 - 1 310	188 - 1 312	187 0 313	187 0 313	187 0 313	25.0
5.5	200 - 1	199 0 301	198 0 302	198 0 302	199 0 301	200 + 1 300	201 + 1 299	203 + 1 297	24.5
6.0	206 0	206 0 294	207 + 1 293	209 + 1 291	211 + 1 289	213 1 287	216 1 284	219 2 281	24.0
6.5	214 + 1	216 + 1 284	218 1 282	221 1 279	224 2 276	227 2 273	231 2 269	234 2 266	23.5
7.0	224 1	227 2 273	230 2 270	234 2 266	237 2 263	241 2 259	245 2 255	249 2 251	23.0
7.5	236 2	239 2 261	243 2 257	247 2 253	251 2 249	255 2 245	259 2 241	262 2 238	22.5
8.0	248 2	252 2 248	256 2 244	260 2 240	264 2 236	268 2 232	271 2 229	274 2 226	22.0
8.5	262 2	266 2 234	270 2 230	273 2 227	277 2 223	280 2 220	282 1 218	285 + 1 215	21.5
9.0	277 2	280 2 220	283 1 217	286 1 214	288 + 1 212	290 + 1 210	292 + 1 208	293 0 207	21.0
9.5	292 1	294 + 1 206	296 + 1 204	298 + 1 202	299 0 201	299 0 201	299 0 201	299 0 201	20.5
10.0	306 + 1	308 0 192	308 0 192	308 0 192	307 - 1 193	306 - 1 194	304 - 1 196	300 - 1 199	20.0
10.5	320 0	319 - 1 181	318 - 1 182	316 - 1 184	312 2 188	309 2 191	305 2 195	301 3 200	19.5
11.0	332 - 1	329 2 171	325 2 175	320 3 180	315 3 185	308 3 192	302 4 198	294 4 206	19.0
11.5	341 3	335 3 165	328 4 172	320 4 180	312 4 188	303 5 197	293 5 207	283 5 217	18.5
12.0	346 4	336 5 164	326 5 174	315 6 185	304 6 196	291 6 209	279 6 221	266 6 234	18.0
12.5	344 6	332 6 168	318 7 182	304 7 196	290 7 210	274 8 226	259 8 241	244 8 256	17.5
13.0	336 8	321 8 179	304 8 196	287 9 213	270 9 230	252 9 248	235 9 265	217 9 283	17.0
13.5	322 9	304 9 196	284 10 216	265 10 235	245 10 255	226 10 274	206 10 294	188 9 312	16.5
14.0	302 10	281 10 219	260 11 240	239 11 261	218 10 282	197 10 303	177 10 323	157 10 343	16.0
14.5	277 11	255 11 245	233 11 267	211 11 289	189 11 311	168 10 332	148 10 352	129 9 371	15.5
15.0	250 11	227 11 273	205 11 295	183 11 317	162 10 338	142 10 358	123 9 377	105 9 395	15.0
15.5	223 11	201 11 299	180 11 320	159 10 341	139 10 361	121 9 379	103 8 397	88 8 412	14.5
16.0	198 10	178 10 322	158 10 342	140 9 360	122 8 378	106 8 394	92 7 408	78 6 422	14.0
16.5	178 9	160 9 340	143 8 357	127 8 373	113 7 387	100 6 400	88 5 412	78 4 422	13.5
17.0	164 8	149 7 351	135 7 365	122 6 378	111 5 389	101 5 399	93 4 407	86 3 414	13.0
17.5	156 6	144 6 356	134 5 366	124 4 376	116 4 384	110 3 390	105 2 395	101 - 1 399	12.5
18.0	154 4	146 4 354	139 3 361	133 3 367	128 2 372	124 - 1 376	122 - 1 378	121 0 379	12.0
18.5	159 3	154 2 346	150 2 350	146 - 1 354	144 - 1 356	143 0 357	143 0 357	144 + 1 356	11.5
19.0	168 - 1	165 - 1 335	164 - 1 336	163 0 337	164 + 1 336	166 + 1 334	169 2 331	170 3 331	11.0
19.5	180 0	179 0 321	180 0 320	181 + 1 319	183 + 1 317	186 2 314	189 2 311	193 2 307	10.5
20.0	194 + 1	195 + 1 305	197 + 1 303	200 1 300	203 2 297	207 2 293	211 2 289	215 2 285	10.0
20.5	208 1	211 2 289	214 2 286	218 2 282	222 2 278	226 2 274	230 2 270	235 2 265	9.5
21.0	223 2	226 2 274	230 2 270	234 2 266	239 2 261	243 2 257	248 2 252	252 2 248	9.0
21.5	238 2	242 2 258	246 2 254	250 2 250	254 2 246	258 2 242	262 2 238	266 2 234	8.5
22.0	252 2	256 2 244	260 2 240	263 2 237	267 2 233	270 2 230	274 2 226	277 1 223	8.0
22.5	264 2	268 2 232	271 2 229	274 2 226	277 1 223	280 1 220	282 + 1 218	284 + 1 216	7.5
23.0	276 1	279 1 221	282 1 218	284 + 1 216	287 + 1 214	289 0 211	288 0 212	288 0 212	7.0
23.5	286 + 1	288 + 1 212	289 + 1 211	290 0 210	291 0 209	291 0 209	290 0 210	290 0 210	6.5
24.0	294 0	294 0 206	294 0 206	294 0 206	292 - 1 208	291 - 1 209	289 - 1 211	286 - 1 214	6.0
24.5	300 - 1	298 - 1 202	296 - 1 204	293 - 1 207	290 2 210	287 2 213	283 2 217	279 2 221	5.5
25.0	302 2	298 2 202	294 2 206	289 2 211	284 3 216	278 3 222	272 3 228	266 3 234	5.0
25.5	299 3	293 3 207	286 4 214	279 4 221	271 4 229	264 4 236	256 4 244	248 4 252	4.5
26.0	291 4	282 5 218	273 5 227	263 5 237	254 5 246	244 5 256	234 5 266	224 5 276	4.0
26.5	278 6	266 6 234	254 6 246	242 6 258	230 6 270	218 6 282	207 6 293	196 5 304	3.5
27.0	258 7	244 7 256	230 7 270	216 7 284	202 7 298	189 6 311	176 6 324	164 6 336	3.0
27.5	233 8	217 8 283	200 8 300	185 8 315	170 7 330	156 7 344	142 6 358	130 6 370	2.5
28.0	204 9	186 9 314	168 9 332	152 8 348	136 8 364	122 7 378	109 6 391	97 5 403	2.0
28.5	173 10	154 9 346	136 9 364	120 8 380	104 7 396	90 7 410	78 6 422	67 5 433	1.5
29.0	143 10	124 9 376	106 8 394	90 8 410	76 7 424	63 6 437	53 5 447	44 4 456	1.0
29.5	115 9	97 8 403	81 8 419	67 7 433	54 6 446	44 5 456	35 4 465	29 3 471	+0.5
30.0	93 8	78 7 422	64 6 436	52 6 448	41 4 459	34 3 466	28 2 472	24 - 1 476	0.0
30.5	79 - 7	66 - 6 434	55 - 5 445	45 - 4 455	38 - 3 462	33 - 2 467	31 - 1 469	30 0 470	-0.5
Arg.	62 v	60 v 122	58 v 120	56 v 118	54 v 116	52 v 114	50 v 112	48 v 110	Arg.

TABLE 4 (concl.).

Vert. Arg. D.

Hor. Arg. 4.

Arg.	16 v 78	18 v 80	20 v 82	22 v 84	24 v 86	26 v 88	28 v 90	30 v 92	Arg.
d									d
-0.5	267 - 11 233	245 - 11 255	223 - 11 277	201 - 11 299	180 - 11 320	159 - 10 341	139 - 10 361	120 - 9 380	30.5
0.0	239 11 261	216 11 284	194 11 306	172 11 328	151 10 349	131 10 369	112 9 388	94 8 406	30.0
+0.5	211 11 289	189 11 311	167 11 333	146 10 354	126 10 374	108 9 392	90 8 410	75 7 425	29.5
1.0	185 11 315	164 10 336	144 10 356	126 9 374	108 8 392	92 8 408	77 7 423	64 6 436	29.0
1.5	165 9 335	146 9 354	129 8 371	113 8 387	98 7 402	84 6 416	73 5 427	63 4 437	28.5
2.0	150 8 350	134 7 366	120 7 380	107 6 393	96 5 404	86 5 414	77 4 423	71 3 429	28.0
2.5	142 6 358	130 6 370	119 5 381	110 4 390	102 4 398	95 3 405	90 2 410	87 - 1 413	27.5
3.0	142 5 358	133 4 367	126 3 374	119 3 381	114 2 386	111 - 1 389	109 - 1 391	108 0 392	27.0
3.5	148 3 352	142 2 358	138 2 362	135 - 1 365	133 - 1 367	132 0 368	132 0 368	134 + 1 366	26.5
4.0	158 - 2 342	156 - 1 344	154 - 1 346	153 0 347	154 0 346	155 + 1 345	157 + 1 343	161 2 339	26.0
4.5	172 0 328	172 0 328	173 0 327	174 + 1 326	176 + 1 324	179 2 321	183 2 317	187 2 313	25.5
5.0	188 + 1 312	190 + 1 310	192 + 1 308	195 2 305	198 2 302	202 2 298	207 2 293	212 3 288	25.0
5.5	206 1 294	208 2 292	212 2 288	216 2 284	220 2 280	224 2 276	229 2 271	234 2 266	24.5
6.0	222 2 278	226 2 274	230 2 270	234 2 266	238 2 262	243 2 257	247 2 253	252 2 248	24.0
6.5	238 2 262	242 2 258	246 2 254	250 2 250	255 2 245	259 2 241	263 2 237	267 2 233	23.5
7.0	253 2 247	257 2 243	261 2 239	264 2 236	268 2 232	272 2 228	275 2 225	278 1 222	23.0

TABLE 5.

Vert. Arg. D.

Hor. Arg. 5.

Arg.	0 v	2 v 66	4 v 68	6 v 70	8 v 72	10 v 74	12 v 76	14 v 78	16 v 80	Arg.
d										d
-0.5	117+6	129+6 271	142+7 258	155+7 245	169+7 231	183+7 217	197+7 203	211+7 189	226+7 174	30.5
0.0	153 7	166 7 234	181 7 219	195 7 205	209 7 191	224 7 176	238 7 162	252 7 148	265 6 135	30.0
+0.5	193 7	207 7 193	222 7 178	236 7 164	250 7 150	263 7 137	276 6 124	288 6 112	299 5 101	29.5
1.0	234 7	247 7 153	261 6 139	273 6 127	285 6 115	296 5 104	306 5 94	316 4 84	324 4 76	29.0
1.5	270 6	282 6 118	293 5 107	303 5 97	312 4 88	320 4 80	327 3 73	333 3 67	338+2 62	28.5
2.0	299 5	308 4 92	316 4 84	323 3 77	329 3 71	334+2 66	337+1 63	339+1 61	339 0 61	28.0
2.5	319 3	324 3 76	329+2 71	333+1 67	335+1 65	336 0 64	335-1 65	333-1 67	330-2 70	27.5
3.0	328+2	330+1 70	331 0 69	331 0 69	330-1 70	328-2 72	324 2 76	319 3 81	313 3 87	27.0
3.5	327 0	327-1 73	325-1 75	322-2 78	317 2 83	312 3 88	305 4 95	298 4 102	289 4 111	26.5
4.0	319-1	316 2 84	311 3 89	306 3 94	299 4 101	291 4 109	283 4 117	273 5 127	263 5 137	26.0
4.5	306 3	300 3 100	294 4 106	286 4 114	278 4 122	269 5 131	259 5 141	248 5 152	238 6 162	25.5
5.0	290 3	283 4 117	275 4 125	266 5 134	257 5 143	247 5 153	236 5 164	226 5 174	214 6 186	25.0
5.5	274 4	266 4 134	256 5 144	247 5 153	237 5 163	227 5 173	216 5 184	205 5 195	194 5 206	24.5
6.0	258 4	248 5 152	239 5 161	229 5 171	219 5 181	209 5 191	198 5 202	188 5 212	178 5 222	24.0
6.5	243 5	233 5 167	224 5 176	214 5 186	204 5 196	194 5 206	184 5 216	174 5 226	164 5 236	23.5
7.0	229 5	219 5 181	210 5 190	200 5 200	190 5 210	180 5 220	171 5 229	162 5 238	153 4 247	23.0
7.5	216 5	207 5 193	197 5 203	187 5 213	178 5 222	168 5 232	159 4 241	151 4 249	142 4 258	22.5
8.0	204 5	194 5 206	184 5 216	175 5 225	166 5 234	157 4 243	148 4 252	140 4 261	133 4 267	22.0
8.5	190 5	181 5 219	171 5 229	162 5 238	153 4 247	144 4 256	136 4 264	129 4 271	122 3 278	21.5
9.0	176 5	166 5 234	157 5 243	148 4 252	139 4 261	131 4 269	124 3 276	118 3 282	112 3 288	21.0
9.5	159 5	150 5 250	141 4 259	133 4 267	125 4 275	118 3 282	112 3 288	106 2 294	102 2 298	20.5
10.0	141 5	132 4 268	124 4 276	117 4 283	110 3 290	104 3 296	100 2 300	96 2 304	93-1 307	20.0
10.5	122 4	114 4 286	108 3 292	102 3 298	96 2 304	92 2 308	89-1 311	88-1 312	87 0 313	19.5
11.0	103 3	97 3 303	92 2 308	88-2 312	85-1 315	84-1 316	83 0 317	83 0 317	85+1 315	19.0
11.5	87 2	84-2 316	81-1 319	80 0 320	79 0 321	80+1 320	82+1 318	85+2 315	90 2 310	18.5
12.0	77-1	76 0 324	76 0 324	78+1 322	80+2 320	84 2 316	89 3 311	95 3 305	102 4 298	18.0
12.5	74+1	76+2 324	80+2 320	84 3 316	90 3 310	97 4 303	105 4 295	114 5 286	124 5 276	17.5
13.0	81 3	86 3 314	94 4 306	102 4 298	110 5 290	120 5 280	131 5 269	142 6 258	154 6 246	17.0
13.5	98 4	107 5 293	117 5 283	128 6 272	139 6 261	151 6 249	164 6 236	177 6 223	190 7 210	16.5
14.0	125 6	137 6 263	149 6 251	162 6 238	175 7 225	188 7 212	202 7 198	215 7 185	229 7 171	16.0
14.5	160 7	174 7 226	187 7 213	201 7 199	214 7 186	228 7 172	241 6 159	254 6 146	266 6 134	15.5
15.0	200 7	214 7 186	227 7 173	240 7 160	253 6 147	266 6 134	278 6 122	289 5 111	299 5 101	15.0
15.5	240 7	252 6 148	265 6 135	277 6 123	288 5 112	298 5 102	307 4 93	315 4 85	322 3 78	14.5
16.0	275 6	286 5 114	296 5 104	305 4 95	313 4 87	320 3 80	326 3 74	331+2 69	334+1 66	14.0
16.5	302 4	310 4 90	317 3 83	323 3 77	328+2 72	331+1 69	333+1 67	334 0 66	334 0 66	13.5
17.0	319 3	324+2 76	328+1 72	330+1 70	331 0 69	329-1 71	327-2 73	323-2 77	323-2 77	13.0
17.5	326+1	328 0 72	328 0 72	326-1 74	324-2 76	320-2 80	316 3 84	310 3 90	303 4 97	12.5
18.0	323-1	321-1 79	318-2 82	314 2 86	308 3 92	302 3 98	294 4 106	286 4 114	277 5 123	12.0
18.5	313 2	308 3 92	302 3 98	295 4 105	288 4 112	279 4 121	270 5 130	260 5 140	249 5 151	11.5
19.0	297 3	290 4 110	282 4 118	273 4 127	264 5 136	254 5 146	244 5 156	233 6 167	222 6 178	11.0
19.5	278 4	269 4 131	260 5 140	251 5 149	240 5 160	230 5 170	219 5 181	208 6 192	197 6 203	10.5
20.0	259 5	249 5 151	240 5 160	229 5 171	219 5 181	208 5 192	197 5 203	187 5 213	176 5 224	10.0
20.5	241 5	231 5 169	221 5 179	210 5 190	200 5 200	190 5 210	179 5 221	169 5 231	159 5 241	9.5
21.0	224 5	214 5 186	204 5 196	194 5 206	184 5 216	174 5 226	165 5 235	155 5 245	146 4 254	9.0
21.5	210 5	200 5 200	190 5 210	180 5 220	170 5 230	161 5 239	152 4 248	144 4 250	136 4 264	8.5
22.0	196 5	186 5 214	177 5 223	168 5 232	159 4 241	150 4 250	142 4 258	134 4 266	127 3 273	8.0
22.5	184 5	174 5 226	165 5 235	156 4 244	147 4 253	140 4 260	132 4 268	125 3 275	119 3 281	7.5
23.0	171 5	162 5 238	153 4 247	144 4 256	137 4 263	129 3 271	123 3 277	117 3 283	112 2 288	7.0
23.5	157 5	148 4 252	140 4 260	132 4 268	125 3 275	118 3 282	113 3 287	108 2 292	104 2 296	6.5
24.0	142 4	134 4 266	126 4 274	119 3 281	113 3 287	107 3 293	103 2 297	99 2 301	96-1 304	6.0
24.5	126 4	119 4 281	112 3 288	106 3 294	101 2 299	96 2 304	93-1 307	91-1 309	90 0 310	5.5
25.0	110 3	103 3 297	98 2 302	93 2 307	90-1 310	87-1 313	86 0 314	86 0 314	86+1 314	5.0
25.5	94 3	89 2 311	86-2 314	83-1 317	82 0 318	81 0 319	82+1 318	84+1 316	88 2 312	4.5
26.0	81-1	78-1 322	77 0 323	77 0 323	78+1 322	81+1 319	84 2 316	89 3 311	94 3 306	4.0
26.5	73 0	73+1 327	75+1 325	78+2 322	82 2 318	87 3 313	93 3 307	101 4 299	109 4 291	3.5
27.0	72+2	76 2 324	81 3 319	87 3 313	94 4 306	102 4 298	111 5 289	121 5 279	132 6 268	3.0
27.5	81 3	88 4 312	96 4 304	106 5 294	116 5 284	126 6 274	138 6 262	150 6 250	163 6 237	2.5
28.0	101 5	111 5 289	122 6 278	134 6 266	146 6 254	159 7 241	172 7 228	186 7 214	199 7 201	2.0
28.5	130 6	142 6 258	156 7 244	169 7 231	183 7 217	197 7 203	211 7 189	225 7 175	238 7 162	1.5
29.0	166 7	180 7 220	195 7 205	209 7 191	223 7 177	237 7 163	251 7 149	264 6 136	276 6 124	1.0
29.5	207 7	221 7 179	236 7 164	249 7 151	263 6 137	275 6 125	287 6 113	298 5 102	309 5 91	+0.5
30.0	247 7	261 7 139	274 6 126	286 6 114	297 5 103	307 5 93	317 4 83	325 4 75	332 3 68	0.0
30.5	283+6	295+5 105	305+5 95	314+4 86	323+4 77	330+3 70	336+3 64	340+2 60	343+1 57	-0.5
Arg.	64 v	62 v 126	60 v 124	58 v 122	56 v 120	54 v 118	52 v 116	50 v 114	48 v 112	Arg.

TABLE 5 (concl.).

Vert. Arg. D.

Hor. Arg. 5.

Arg.	18 v 82	20 v 84	22 v 86	24 v 88	26 v 90	28 v 92	30 v 94	32 v 96	Arg.
d									d
-0.5	239+7 161	253+7 147	266+6 134	278+6 122	290+6 110	301+5 99	310+5 90	319+4 81	30.5
0.0	277 6 123	289 6 111	300 5 100	310 5 90	319 4 81	327 4 73	334 3 66	339+2 61	30.0
+0.5	309 5 91	318 4 82	326 4 74	333 3 67	338+2 62	342+2 58	345+1 55	347 0 53	29.5
1.0	331 3 69	336 2 64	341+2 59	344+1 56	345 0 55	344-1 56	344-1 56	342-2 58	29.0
1.5	341+1 59	342+1 58	343 0 57	342-1 58	339-2 61	336-2 64	331 3 69	324 3 76	28.5
2.0	339-1 61	336-1 64	333-2 67	328 3 72	322 3 78	315 4 85	307 4 93	298 5 102	28.0
2.5	326 2 74	321 3 79	314 4 86	306 4 94	297 5 103	288 5 112	277 5 123	266 6 134	27.5
3.0	306 4 94	297 4 103	288 5 112	278 5 122	267 6 133	256 6 144	244 6 156	232 6 168	27.0
3.5	280 5 120	270 5 130	259 6 141	248 6 152	236 6 164	224 6 176	211 6 189	199 6 201	26.5
4.0	253 5 147	242 6 158	230 6 170	218 6 182	206 6 194	194 6 206	182 6 218	170 6 230	26.0
4.5	226 6 174	215 6 185	203 6 197	192 6 208	180 6 220	169 6 231	158 5 242	147 5 253	25.5
5.0	203 6 197	192 6 208	181 6 219	170 5 230	159 5 241	149 5 251	139 5 2		

TABLE 6.

Vert. Arg. D.

Hor. Arg. 6.

Arg.	0 v	4 v 70	8 v 74	12 v 78	16 v 82	20 v 86	24 v 90	28 v 94	32 v 98	Arg.
d										d
-0.5	52+3	65+3 135	79+4 121	94+4 106	109+4 91	124+4 76	138+3 62	151+3 49	162+2 38	30.5
0.0	47 3	60 3 140	74 4 126	89 4 111	105 4 95	120 4 80	134 4 66	148 3 52	159 3 41	30.0
+0.5	44 3	56 3 144	70 4 130	84 4 116	100 4 100	115 4 85	130 4 70	144 3 56	156 3 44	29.5
1.0	41 3	52 3 148	66 3 134	80 4 120	95 4 105	110 4 90	125 4 75	139 3 61	152 3 48	29.0
1.5	39 2	50 3 150	62 3 138	76 4 124	90 4 110	105 4 95	120 4 80	134 3 66	146 3 54	28.5
2.0	39 2	48 3 152	60 3 140	72 3 128	86 4 114	100 4 100	114 4 86	128 3 72	141 3 59	28.0
2.5	39 2	47 2 153	58 3 142	69 3 131	82 3 118	95 3 105	109 3 91	122 3 78	135 3 65	27.5
3.0	40 1	47 2 153	56 2 144	66 3 134	78 3 122	91 3 109	104 3 96	116 3 84	128 3 72	27.0
3.5	42 1	47 2 153	55 2 145	64 2 136	75 3 125	87 3 113	99 3 101	111 3 89	122 3 78	26.5
4.0	44 1	48 1 152	54 2 146	63 2 137	72 2 128	83 3 117	94 3 106	105 3 95	116 3 84	26.0
4.5	46+1	49 1 151	54 2 146	61 2 139	70 2 130	79 2 121	89 3 111	100 3 100	110 3 90	25.5
5.0	48 0	51 1 149	55 1 145	61 2 139	68 2 132	76 2 124	85 2 115	95 2 105	105 2 95	25.0
5.5	51 0	52+1 148	55 1 145	60 1 140	66 2 134	74 2 126	82 2 118	91 2 109	100 2 100	24.5
6.0	53 0	54 0 146	56+1 144	59 1 141	64 1 136	71 2 129	78 2 122	87 2 113	96 2 104	24.0
6.5	55 0	55 0 145	56 0 144	59 1 141	63 1 137	69 2 131	76 2 124	83 2 117	91 2 109	23.5
7.0	57 0	56 0 144	56 0 144	58+1 142	62 1 138	67 1 133	73 2 127	80 2 120	87 2 113	23.0
7.5	59-1	57 0 143	56 0 144	58 0 142	60 1 140	64 1 136	70 1 130	76 2 124	83 2 117	22.5
8.0	60 1	58-1 142	56 0 144	57 0 143	58+1 142	62 1 138	66 1 134	72 2 128	79 2 121	22.0
8.5	62 1	58 1 142	56 0 144	56 0 143	57 0 141	63 1 137	69 2 131	75 2 125	81 2 119	21.5
9.0	63 1	59 1 141	56-1 144	54 0 146	54 0 146	56 1 144	60 1 140	65 1 135	71 2 129	21.0
9.5	64 2	59 1 141	55 1 145	53 0 147	52 0 148	53+1 147	56 1 144	60 1 140	66 2 134	20.5
10.0	66 2	59 1 141	54 1 146	51-1 149	49 0 151	50 0 150	52 1 148	55 1 145	61 2 139	20.0
10.5	68 2	60 2 140	54 1 146	49 1 151	47 0 153	46 0 154	47+1 153	50 1 150	55 1 145	19.5
11.0	70 2	61 2 139	54 2 146	48 1 152	44-1 156	42 0 158	43 0 157	45 1 155	50 1 150	19.0
11.5	72 3	62 2 138	54 2 146	47 1 153	42 1 158	39 0 161	38 0 162	40+1 160	44 1 156	18.5
12.0	75 3	64 3 136	54 2 146	46 2 154	40 1 160	36-1 164	34 0 166	35 0 165	38 1 162	18.0
12.5	78 3	66 3 134	55 3 145	46 2 154	38 2 162	33 1 167	30 0 170	30 0 170	33 1 167	17.5
13.0	82 3	69 3 131	57 3 143	46 2 154	38 2 162	31 1 169	27-1 173	26 0 174	28+1 172	17.0
13.5	86 4	72 3 128	59 3 141	47 3 153	38 2 162	30 2 170	25 1 175	23 0 177	24 0 176	16.5
14.0	90 4	76 4 124	62 3 138	49 3 151	39 2 161	30 2 170	24 1 176	21 0 179	21 0 179	16.0
14.5	95 4	80 4 120	66 3 134	52 3 148	41 3 159	31 2 169	24 1 176	20-1 180	19 0 181	15.5
15.0	100 4	85 4 115	70 4 130	56 3 144	44 3 156	34 2 166	26 2 174	21 1 179	19 0 181	15.0
15.5	105 4	90 4 110	74 4 126	60 3 140	48 3 152	37 2 163	28 2 172	23 1 177	20 0 180	14.5
16.0	110 4	94 4 106	80 4 120	65 3 135	52 3 148	41 3 159	32 2 168	26 1 174	22-1 178	14.0
16.5	114 4	99 4 101	85 4 115	71 3 129	58 3 142	46 3 154	37 2 163	30 1 170	25 1 175	13.5
17.0	118 3	104 3 96	90 3 110	76 3 124	64 3 136	52 3 148	42 2 158	35 2 165	29 1 171	13.0
17.5	122 3	109 3 91	96 3 104	82 3 118	70 3 130	58 3 142	49 2 151	41 2 159	35 1 165	12.5
18.0	125 3	113 3 87	101 3 99	88 3 112	76 3 124	65 3 135	55 2 145	47 2 153	40 1 160	12.0
18.5	128 3	117 3 83	106 3 94	94 3 106	82 3 118	71 3 129	62 2 138	53 2 147	46 1 154	11.5
19.0	130 2	121 3 79	110 3 90	99 3 101	88 3 112	78 3 122	68 2 132	60 2 140	53 2 147	11.0
19.5	132 2	124 2 76	114 2 86	104 3 96	94 3 106	84 2 116	74 2 126	66 2 134	58 2 142	10.5
20.0	134 2	126 2 74	118 2 82	108 2 92	99 2 101	89 2 111	80 2 120	72 2 128	64 2 136	10.0
20.5	136 2	129 2 71	121 2 79	112 2 88	104 2 96	94 2 106	85 2 115	77 2 123	69 2 131	9.5
21.0	137 1	131 2 69	124 2 76	116 2 84	108 2 92	99 2 101	90 2 110	82 2 118	74 2 126	9.0
21.5	138 1	133 1 67	127 2 73	120 2 80	112 2 88	104 2 96	95 2 105	87 2 113	79 2 121	8.5
22.0	140 1	135 1 65	130 2 70	123 2 77	116 2 84	108 2 92	99 2 101	91 2 109	83 2 117	8.0
22.5	141-1	138 1 62	133 1 67	126 2 74	120 2 80	112 2 88	104 2 96	95 2 105	87 2 113	7.5
23.0	143 0	140 1 60	136 1 64	130 2 70	123 2 77	116 2 84	108 2 92	100 2 100	91 2 109	7.0
23.5	145 0	143 1 57	139 1 61	134 1 66	128 2 72	120 2 80	112 2 88	104 2 96	96 2 104	6.5
24.0	147 0	146-1 54	142 1 58	138 1 62	132 2 68	125 2 75	117 2 83	109 2 91	100 2 100	6.0
24.5	149 0	149 0 51	147 1 53	143 1 57	137 2 63	130 2 70	123 2 77	114 2 86	105 2 95	5.5
25.0	152 0	152 0 48	151-1 49	148 1 52	143 1 57	136 2 64	128 2 72	120 2 80	110 2 90	5.0
25.5	154+1	156 0 44	155 0 45	153 1 47	148 1 52	142 2 58	134 2 66	125 2 75	116 3 84	4.5
26.0	156 1	159 0 41	160 0 40	158-1 42	154 1 46	148 2 52	141 2 59	132 2 68	122 3 78	4.0
26.5	158 1	162+1 38	164 0 36	163 0 37	160 1 40	154 2 46	147 2 53	138 2 62	128 3 72	3.5
27.0	160 1	165 1 35	168 0 32	168 0 32	165 1 35	160 1 40	154 2 46	145 2 55	134 3 66	3.0
27.5	161 2	167 1 33	171+1 29	172 0 28	170-1 30	166 1 34	160 2 40	151 2 49	141 3 59	2.5
28.0	161 2	168 2 32	173 1 27	175 0 25	175 0 25	171 1 29	166 2 34	157 2 43	147 3 53	2.0
28.5	161 2	169 2 31	175 1 25	178 0 22	178 0 22	175 1 25	170 2 30	162 2 38	152 3 48	1.5
29.0	159 3	168 2 32	175 1 25	179+1 21	180 0 20	179 1 21	174 1 26	167 2 33	157 3 43	1.0
29.5	156 3	166 2 34	174 2 26	179 1 21	181 0 19	181-1 19	177 1 23	170 2 30	161 3 39	+0.5
30.0	153 3	163 2 37	172 2 28	178 1 22	181 0 19	181 0 19	178 1 22	173 2 27	164 2 36	0.0
30.5	148+3	160+3 40	169+2 31	175+1 25	179+1 21	180 0 20	178-1 22	174-2 26	166-2 34	-0.5
Arg.	66 v	62 v 128	58 v 124	54 v 120	50 v 116	46 v 112	42 v 108	38 v 104	34 v 100	Arg.

TABLE 7.

Vert. Arg. D.

Hor. Arg. 7.

Arg.	0 v	4 v 54	8 v 58	12 v 62	16 v 66	20 v 70	24 v 74	Arg.
d								d
-0.5	89+4	106+4 94	122+4 78	136+3 64	148+3 52	158+2 42	163+1 37	30.5
0.0	84 4	100 4 100	117 4 83	133 4 67	146 3 54	157 2 43	164 1 36	30.0
+0.5	78 4	95 4 105	112 4 88	128 4 72	142 3 58	154 2 46	162 2 38	29.5
1.0	74 4	90 4 110	106 4 94	122 4 78	136 3 64	149 3 51	158 2 42	29.0
1.5	72 3	86 4 114	101 4 99	116 4 84	130 3 70	142 3 58	152 2 48	28.5
2.0	71 3	83 3 117	97 3 103	110 3 90	123 3 77	135 3 65	144 2 56	28.0
2.5	72 2	83 3 117	94 3 106	106 3 94	117 3 83	127 2 73	136 2 64	27.5
3.0	76 2	84 2 116	93 2 107	102 2 98	112 2 88	121 2 79	128 2 72	27.0
3.5	80 1	86 2 114	93 2 107	101 2 99	108 2 92	115 2 85	121 1 79	26.5
4.0	86 1	91 1 109	96 1 104	101 1 99	106 1 94	111 1 89	115+1 85	26.0
4.5	92+1	95+1 105	98+1 102	102+1 98	105+1 95	107+1 93	110 0 90	25.5
5.0	99 0	100 0 100	102 0 98	104 0 96	105 0 95	106 0 94	106 0 94	25.0
5.5	105 0	106 0 94	106 0 94	106 0 94	106 0 94	105 0 95	104 0 96	24.5
6.0	110 0	110 0 90	110 0 90	109 0 91	108 0 92	106-1 94	103-1 97	24.0
6.5	114 0	114 0 86	113 0 87	111 0 89	109-1 91	106 1 94	103 1 97	23.5
7.0	116 0	116 0 84	115 0 85	113-1 87	110 1 90	107 1 93	103 1 97	23.0
7.5	117 0	117 0 83	116 0 84	114 1 86	111 1 89	108 1 92	103 1 97	22.5

TABLE 8.

Vert. Arg. D.

Hor. Arg. 8.

TABLE 9.

Vert. Arg. D.

Hor. Arg. 9.

TABLE 10. Vert. Arg. D. Hor. Arg. 10.

Arg.	0 v	2 v 27	4 v 29	6 v 31	8 v 33	10 v 35	12 v 37	Arg.
d								d
-0.5	3 + I	4 + I 36	7 + 2 33	10 + 2 30	14 + 2 26	19 + 2 21	23 + 2 17	30.5
0.0	4 I	7 2 33	10 2 30	15 2 25	19 2 21	24 2 16	28 2 12	30.0
+0.5	7 2	11 2 29	15 2 25	19 2 21	24 2 16	28 2 12	32 2 8	29.5
1.0	11 2	15 2 25	20 2 20	24 2 16	28 2 12	32 2 8	35 1 5	29.0
1.5	16 2	20 2 20	24 2 16	28 2 12	31 1 9	34 + I 6	36 + I 4	28.5
2.0	21 2	24 2 16	28 2 12	31 1 9	33 + I 7	34 0 6	35 0 5	28.0
2.5	24 2	28 1 12	30 1 10	32 + I 8	33 0 7	33 0 7	33 0 7	27.5
3.0	27 1	29 + I 11	31 + I 9	32 0 8	32 0 8	31 0 9	30 - I 10	27.0
3.5	29 + I	30 0 10	30 0 10	30 0 10	29 - I 11	28 - I 12	26 1 14	26.5
4.0	29 0	29 0 11	29 0 11	28 - I 12	27 1 13	25 1 15	23 1 17	26.0
4.5	28 0	28 0 12	26 - I 14	25 1 15	24 1 16	22 1 18	20 1 20	25.5
5.0	26 0	25 - I 15	24 1 16	23 1 17	21 1 19	19 1 21	18 1 22	25.0
5.5	24 0	23 1 17	22 1 18	20 1 20	19 1 21	18 - I 22	16 - I 24	24.5
6.0	22 0	21 - I 19	20 - I 20	19 - I 21	18 - I 22	17 0 23	16 0 24	24.0
6.5	21 0	20 0 20	19 0 21	18 0 22	17 0 23	17 0 23	16 0 24	23.5
7.0	19 0	19 0 21	18 0 22	18 0 22	17 0 23	17 0 23	17 0 23	23.0
7.5	18 0	18 0 22	18 0 22	18 0 22	18 0 22	18 0 22	19 0 23	22.5
8.0	18 0	18 0 22	18 0 22	18 0 22	19 0 21	20 0 20	20 0 20	22.0
8.5	18 0	18 0 22	19 0 21	19 0 21	20 0 20	21 0 19	22 0 18	21.5
9.0	18 0	19 0 21	20 + I 20	21 0 19	22 0 18	23 0 17	24 0 16	21.0
9.5	19 + I	20 + I 20	21 1 19	23 + I 17	24 0 16	24 0 16	25 0 15	20.5
10.0	20 1	22 1 18	23 1 17	25 + I 15	26 0 14	26 0 14	26 0 14	20.0
10.5	23 1	24 1 16	26 + I 14	27 0 13	27 0 13	27 0 13	27 0 13	19.5
11.0	26 1	27 + I 13	28 0 12	28 0 12	28 0 12	27 - I 13	27 - I 13	19.0
11.5	29 + I	30 0 10	30 0 10	30 0 10	29 0 11	27 - I 13	25 1 15	18.5
12.0	31 0	31 0 9	31 0 9	29 - I 11	28 - I 12	25 1 15	23 1 17	18.0
12.5	32 0	32 - I 8	30 - I 10	28 1 12	25 1 15	22 2 18	19 2 21	17.5
13.0	33 - I	31 1 9	28 1 12	25 2 15	21 2 19	18 2 22	14 2 26	17.0
13.5	32 1	28 2 12	25 2 15	21 2 19	17 2 23	13 2 27	10 2 30	16.5
14.0	29 2	25 2 15	21 2 19	16 2 24	12 2 28	9 2 31	6 1 34	16.0
14.5	25 2	20 2 20	16 2 24	12 2 28	8 2 32	5 1 35	3 - I 37	15.5
15.0	20 2	16 2 24	11 2 29	8 2 32	5 1 35	3 - I 37	2 0 38	15.0
15.5	15 2	11 2 29	8 2 32	5 1 35	3 - I 37	2 0 38	2 0 38	14.5
16.0	11 2	8 2 32	5 1 35	4 - I 36	3 0 37	3 0 37	5 + I 35	14.0
16.5	8 1	6 - I 34	4 - I 36	4 0 36	5 0 35	6 + I 34	8 1 32	13.5
17.0	7 - I	6 0 34	6 0 34	8 + I 32	10 1 30	13 2 27	13 2 27	13.0
17.5	8 0	8 0 32	8 + I 32	10 + I 30	12 1 28	14 1 26	17 2 23	12.5
18.0	9 0	10 + I 30	11 1 29	13 1 27	16 1 24	18 1 22	21 1 19	12.0
18.5	11 + I	13 1 27	15 1 25	17 1 23	20 1 20	22 1 18	24 1 16	11.5
19.0	14 1	16 1 24	18 1 22	20 1 20	22 1 18	24 1 16	26 + I 14	11.0
19.5	17 1	19 1 21	21 1 19	23 1 17	24 + I 16	26 + I 14	27 0 13	10.5
20.0	20 1	21 1 19	23 + I 17	24 + I 16	25 0 15	26 0 14	26 0 14	10.0
20.5	21 + I	22 + I 18	24 0 16	24 0 16	25 0 15	25 0 15	25 0 15	9.5
21.0	22 0	23 0 17	24 0 16	24 0 16	24 0 16	24 0 16	24 0 16	9.0
21.5	22 0	23 0 17	23 0 17	23 0 17	23 0 17	22 0 18	22 0 18	8.5
22.0	22 0	22 0 18	22 0 18	22 0 18	22 0 18	21 0 19	20 0 20	8.0
22.5	22 0	21 0 19	21 0 19	20 0 20	20 0 20	19 0 21	19 0 21	7.5
23.0	21 0	20 0 20	19 0 21	18 0 22	18 0 22	17 0 23	17 0 23	7.0
23.5	19 0	18 0 22	18 0 22	17 0 23	17 0 23	16 0 24	16 0 24	6.5
24.0	18 0	17 0 23	16 0 24	16 0 24	15 0 25	15 0 25	16 0 24	6.0
24.5	16 0	15 0 25	14 0 26	14 0 26	14 0 26	15 0 25	16 0 24	5.5
25.0	14 0	13 0 27	13 0 27	14 0 26	14 0 26	15 + I 25	17 + I 23	5.0
25.5	12 0	12 0 28	13 0 27	14 + I 26	15 + I 25	17 1 23	19 1 21	4.5
26.0	11 0	12 + I 28	13 + I 27	15 1 25	17 1 23	19 1 21	22 1 18	4.0
26.5	11 + I	13 1 27	15 1 25	18 1 22	20 1 20	23 1 17	25 1 15	3.5
27.0	13 1	15 1 25	18 1 22	21 1 19	24 1 16	27 1 13	29 1 11	3.0
27.5	16 2	19 2 21	22 2 18	25 2 15	28 1 12	30 1 10	32 + I 8	2.5
28.0	19 2	23 2 17	27 2 13	30 1 10	32 1 8	34 + I 6	35 0 5	2.0
28.5	24 2	28 2 12	31 2 9	34 1 6	36 + I 4	36 0 4	36 0 4	1.5
29.0	29 2	32 2 8	35 1 5	37 + I 3	38 0 2	37 0 3	36 - I 4	1.0
29.5	33 2	36 1 4	38 + I 2	38 0 2	38 0 2	36 - I 4	34 2 6	+0.5
30.0	36 1	38 + I 2	38 0 2	38 - I 4	36 - I 4	33 2 7	30 2 10	0.0
30.5	37 + I	38 0 2	37 - I 3	36 - I 4	33 - 2 7	30 - 2 10	26 - 2 14	-0.5
Arg.	25 v	23 v 48	21 v 46	19 v 44	17 v 42	15 v 40	13 v 38	Arg.

Arg.	0 v	2 v 23	4 v 25	6 v 27	8 v 29	10 v 31	Arg.	Arg.	0 v	4 v 44	Arg.
d							d	d			d
-0.5	30 - I	28 - I 12	25 - I 15	22 - 2 18	19 - 2 21	16 - 2 24	30.5	-0.5	46 - I	41 - 2 19	30.5
0.0	26 1	24 2 16	20 2 20	17 2 23	14 1 26	12 - I 28	30.0	0.0	46 1	41 2 19	30.0
+0.5	22 2	19 2 21	16 1 24	13 1 27	11 - I 29	9 0 31	29.5	+0.5	46 1	41 2 19	29.5
1.0	17 2	14 1 26	12 - I 28	10 - I 30	9 0 31	9 0 31	29.0	1.0	46 1	41 2 19	29.0
1.5	13 1	11 - I 29	9 0 31	9 0 31	9 0 31	11 + I 29	28.5	1.5	46 1	40 2 20	28.5
2.0	10 - I	9 0 31	9 0 31	10 + I 30	12 + I 28	14 1 26	28.0	2.0	46 1	40 2 20	28.0
2.5	9 0	9 0 31	10 + I 30	12 1 28	15 2 25	19 2 21	27.5	2.5	46 1	40 2 20	27.5
3.0	9 + I	11 + I 29	13 1 27	16 2 24	20 2 20	23 2 17	27.0	3.0	46 1	40 2 20	27.0
3.5	11 1	14 1 26	17 2 23	20 2 20	24 2 16	27 1 13	26.5	3.5	45 1	39 2 21	26.5
4.0	15 1	18 2 22	21 2 19	24 2 16	27 1 13	30 + I 10	26.0	4.0	45 1	39 2 21	26.0
4.5	18 2	22 2 18	25 1 15	27 1 13	29 + I 11	31 0 9	25.5	4.5	44 1	38 2 22	25.5
5.0	22 2	24 1 16	27 1 13	29 + I 11	30 0 10	30 0 10	25.0	5.0	43 1	37 2 23	25.0
5.5	24 1	27 1 13	28 + I 12	30 0 10	30 0 10	29 0 11	24.5	5.5	43 1	36 2 24	24.5
6.0	26 1	28 + I 12	29 0 11	29 0 11	29 0 11	28 - I 12	24.0	6.0	42 1	35 2 25	24.0
6.5	27 1	28 0 12	29 0 11	28 0 12	28 - I 12	26 1 14	23.5	6.5	41 1	34 2 26	23.5
7.0	28 + I	28 0 12	28 0 12	28 - I 12	26 1 14	24 1 16	23.0	7.0	40 2	33 2 27	23.0
7.5	28 0	28 0 12	28 0 12	27 1 13	25 1 15	23 1 17	22.5	7.5	39 2	32 2 28	22.5
8.0	28 0	28 0 12	27 - I 13	26 1 14	24 1 16	21 1 19	22.0	8.0	38 2	31 2 29	22.0
8.5	29 0	28 - I 12	26 1 14	25 1 15	22 1 18	20 1 20	21.5	8.5	37 2	30 2 30	21.5
9.0	29 0	27 1 13	25 1 15	23 1 17	20 1 20	18 1 22	21.0	9.0	36 2	29 2 31	21.0
9.5	28 - I	26 1 14	24 1 16	21 1 19	18 1 22	15 1 25	20.5	9.5	35 2	28 2 32	20.5
10.0	26 1	24 1 16	21 1 19	18 1 22	15 1 25	13 1 27	20.0	10.0	34 2	27 2 33	20.0
10.5	24 1	21 2 19	18 2 22	15 1 25	12 1 28	10 - I 30	19.5	10.5	33 2	26 2 34	19.5
11.0	21 2	18 2 22	14 1 26	12 1 28	10 - I 30	9 0 31	19.0	11.0	32 2	25 2 35	19.0
11.5	17 2	14 1 26	12 1 28	10 - I 30	9 0 31	9 0 31	18.5	11.5	32 2	24 2 36	18.5
12.0	13 1	11 - I 29	9 - I 31	8 0 32	9 0 31	10 + I 30	18.0	12.0	31 2	24 2 36	18.0
12.5	10 - I	9 0 31	9 0 31	9 + I 31	11 + I 29	13 1 27	17.5	12.5	31 2	24 2 36	17.5
13.0	9 0	9 0 31	10 + I 30	12 1 28	14 1 26	17 2 23	17.0	13.0	30 2	23 2 37	17.0
13.5	9 + I	10 + I 30	13 1 27	16 2 24	19 2 21	22 2 18	16.5	13.5	30 2	23 2 37	16.5
14.0	12 1	14 1 26	17 2 23	20 2 20	24 2 16	26 1 14	16.0	14.0	30 2	23 2 37	16.0

TABLE 10 (concl.). Vert. Arg. D. Hor. Arg. 10.

TABLE 11. Vert. Arg. D. Hor. Arg. 11.

TABLE 12. Vert. Arg. D. Hor. Arg. 16.

Arg.	8 v 48	12 v 52	16 v 56	20 v 60	Arg.
d					d
-0.5	34-2 26	26-2 34	20-2 40	14-1 46	30.5
0.0	34 2 26	26 2 34	20 2 40	14 1 46	30.0
+0.5	34 2 26	26 2 34	19 2 41	14 1 46	29.5
1.0	34 2 26	26 2 34	19 2 41	14 1 46	29.0
1.5	34 2 26	26 2 34	19 2 41	14 1 46	28.5
2.0	33 2 27	26 2 34	19 2 41	13 1 47	28.0
2.5	33 2 27	26 2 34	19 2 41	13 1 47	27.5
3.0	33 2 27	26 2 34	19 2 41	13 1 47	27.0
3.5	32 2 28	25 2 35	18 2 42	13 1 47	26.5
4.0	32 2 28	25 2 35	18 1 42	13 1 47	26.0
4.5	31 2 29	24 2 36	18 1 42	12 1 48	25.5
5.0	30 2 30	23 2 37	17 1 43	12 1 48	25.0
5.5	29 2 31	23 2 37	16 1 44	12 1 48	24.5
6.0	28 2 32	22 2 38	16 1 44	11 1 49	24.0
6.5	27 2 33	21 2 39	15 1 45	11 1 49	23.5
7.0	26 2 34	20 1 40	14 1 46	10 1 50	23.0
7.5	25 2 35	19 1 41	14 1 46	10 1 50	22.5
8.0	24 2 36	18 1 42	13 1 47	10-1 50	22.0
8.5	23 2 37	17 1 43	12 1 48	9 0 51	21.5
9.0	22 2 38	16 1 44	11 1 49	9 0 51	21.0
9.5	21 2 39	15 1 45	11 1 49	8 0 52	20.5
10.0	20 2 40	14 1 46	10 1 50	8 0 52	20.0
10.5	19 2 41	14 1 46	10 1 50	8 0 52	19.5
11.0	19 2 41	13 1 47	9 1 51	8 0 52	19.0
11.5	18 2 42	12 1 48	9 1 51	7 0 53	18.5
12.0	17 1 43	12 1 48	8 1 52	7 0 53	18.0
12.5	17 1 43	12 1 48	8 1 52	7 0 53	17.5
13.0	17 1 43	12 1 48	8 1 52	7 0 53	17.0
13.5	17 1 43	11 1 49	8 1 52	7 0 53	16.5
14.0	16 1 44	11 1 49	8 1 52	7 0 53	16.0
14.5	16 1 44	11 1 49	8 1 52	7 0 53	15.5
15.0	16 1 44	11 1 49	8 1 52	7 0 53	15.0
15.5	16 1 44	11 1 49	8 1 52	7 0 53	14.5
16.0	16 1 44	11 1 49	8 1 52	7 0 53	14.0
16.5	16 1 44	11 1 49	8 1 52	7 0 53	13.5
17.0	16 1 44	11 1 49	8-1 52	7 0 53	13.0
17.5	16 1 44	11 1 49	8 0 52	7 0 53	12.5
18.0	16 1 44	11 1 49	8 0 52	7 0 53	12.0
18.5	15 1 45	11 1 49	8 0 52	7 0 53	11.5
19.0	15 1 45	10 1 50	8 0 52	8 0 52	11.0
19.5	15 1 45	10 1 50	8 0 52	8 0 52	10.5
20.0	14 1 46	10 1 50	8 0 52	8 0 52	10.0
20.5	14 1 46	10 1 50	8 0 52	8 0 52	9.5
21.0	13 1 47	10 1 50	8 0 52	9 0 51	9.0
21.5	12 1 48	9-1 51	8 0 52	9 0 51	8.5
22.0	12 1 48	9 0 51	8 0 52	10+1 50	8.0
22.5	11 1 49	9 0 51	8 0 52	10 1 50	7.5
23.0	11 1 49	8 0 52	8 0 52	10 1 50	7.0
23.5	10 1 50	8 0 52	8 0 52	11 1 49	6.5
24.0	10 1 50	8 0 52	9 0 51	11 1 49	6.0
24.5	9 1 51	8 0 52	9 0 51	12 1 48	5.5
25.0	9-1 51	8 0 52	9+1 51	12 1 48	5.0
25.5	8 0 52	8 0 52	9 1 51	12 1 48	4.5
26.0	8 0 52	7 0 53	9 1 51	13 1 47	4.0
26.5	8 0 52	7 0 53	9 1 51	13 1 47	3.5
27.0	8 0 52	7 0 53	9 1 51	13 1 47	3.0
27.5	7 0 53	7 0 53	9 1 51	13 1 47	2.5
28.0	7 0 53	7 0 53	9 1 51	13 1 47	2.0
28.5	7 0 53	7 0 53	9 1 51	14 1 46	1.5
29.0	7 0 53	7 0 53	9 1 51	14 1 46	1.0
29.5	7 0 53	7 0 53	9 1 51	14 1 46	+0.5
30.0	7 0 53	7 0 53	9 1 51	14 1 46	0.0
30.5	7 0 53	7 0 53	9+1 51	14+1 46	-0.5
Arg.	32 v 72	28 v 68	24 v 64	20 v 60	Arg.

Arg.	2 v 24	6 v 28	10 v 32	Arg.
d				d
-0.5	19+2 21	28+2 12	34+1 6	30.5
0.0	20 2 20	29 2 11	35 1 5	30.0
+0.5	20 2 20	29 2 11	35 1 5	29.5
1.0	21 2 19	30 2 10	35 1 5	29.0
1.5	21 2 19	30 2 10	35 1 5	28.5
2.0	22 2 18	30 2 10	34 1 6	28.0
2.5	22 2 18	30 2 10	34 1 6	27.5
3.0	22 2 18	29 1 11	34+1 6	27.0
3.5	22 2 18	29 1 11	33 0 7	26.5
4.0	22 2 18	29 1 11	33 0 7	26.0
4.5	22 2 18	28 1 12	32 0 8	25.5
5.0	22 2 18	28 1 12	32 0 8	25.0
5.5	22 2 18	28 1 12	31 0 9	24.5
6.0	22 2 18	28 1 12	31 0 9	24.0
6.5	22 2 18	28 1 12	31 0 9	23.5
7.0	22 2 18	28 1 12	31 0 9	23.0
7.5	22 2 18	28 1 12	31 0 9	22.5
8.0	22 2 18	28 1 12	31 0 9	22.0
8.5	22 2 18	28 1 12	31 0 9	21.5
9.0	22 2 18	28 1 12	31 0 9	21.0
9.5	22 2 18	28 1 12	31 0 9	20.5
10.0	22 2 18	28 1 12	31 0 9	20.0
10.5	22 2 18	28 1 12	31 0 9	19.5
11.0	22 2 18	28 1 12	32 0 8	19.0
11.5	22 2 18	28 1 12	32 0 8	18.5
12.0	22 2 18	29 1 11	33 0 7	18.0
12.5	23 2 17	29 1 11	33 0 7	17.5
13.0	23 2 17	30 1 10	34 0 6	17.0
13.5	23 2 17	30 1 10	34 0 6	16.5
14.0	23 2 17	31 1 9	35 0 5	16.0
14.5	24 2 16	31 1 9	35 0 5	15.5
15.0	24 2 16	32 1 8	35 0 5	15.0
15.5	25 2 15	32 1 8	35 0 5	14.5
16.0	25 2 15	32 1 8	35 0 5	14.0
16.5	25 2 15	32 1 8	34 0 6	13.5
17.0	25 2 15	31 1 9	34 0 6	13.0
17.5	25 2 15	31 1 9	34 0 6	12.5
18.0	25 2 15	31 1 9	33 0 7	12.0
18.5	25 2 15	30 1 10	32 0 8	11.5
19.0	25 2 15	30 1 10	32 0 8	11.0
19.5	24 2 16	29 1 11	32 0 8	10.5
20.0	24 2 16	29 1 11	31 0 9	10.0
20.5	24 1 16	29 1 11	31 0 9	9.5
21.0	24 1 16	29 1 11	31 0 9	9.0
21.5	24 1 16	29 1 11	31 0 9	8.5
22.0	24 1 16	29 1 11	31 0 9	8.0
22.5	24 1 16	29 1 11	31 0 9	7.5
23.0	24 1 16	29 1 11	31 0 9	7.0
23.5	24 1 16	29 1 11	31 0 9	6.5
24.0	24 1 16	29 1 11	31 0 9	6.0
24.5	24 2 16	30 1 10	32 0 8	5.5
25.0	25 2 15	30 1 10	32 0 8	5.0
25.5	25 2 15	30 1 10	32 0 8	4.5
26.0	25 2 15	31 1 9	33 0 7	4.0
26.5	25 2 15	31 1 9	34 0 6	3.5
27.0	26 2 14	32 1 8	34 0 6	3.0
27.5	26 2 14	32 1 8	35 0 5	2.5
28.0	27 2 13	33 1 7	35 0 5	2.0
28.5	27 2 13	34 1 6	36 0 4	1.5
29.0	28 2 12	34 1 6	36 0 4	1.0
29.5	28 2 12	35 1 5	36 0 4	+0.5
30.0	29 2 11	35 1 5	36 0 4	0.0
30.5	29+2 11	35+1 5	36 0 4	-0.5
Arg.	20 v 42	16 v 38	12 v 34	Arg.

Arg.	0 v	2 v	4 v	6 v	8 v	10 v	12 v	Arg.
d								d
-0.5	1766+30	1828+31 2172	1890+32 2110	1954+32 2046	2018+32 1982	2082+31 1918	2144+31 1856	30.5
0.0	1754 28	1810 29 2190	1869 29 2131	1928 30 2072	1988 30 2012	2048 30 1952	2108 29 1892	30.0
+0.5	1721 26	1775 28 2225	1832 29 2168	1890 29 2110	1950 30 2050	2010 30 1990	2070 30 1930	29.5
1.0	1680 27	1736 28 2264	1794 30 2206	1855 31 2145	1917 32 2083	1981 32 2010	2045 32 1955	29.0
1.5	1646 29	1705 31 2295	1768 32 2232	1834 34 2166	1902 35 2098	1972 35 2028	2043 35 1957	28.5
2.0	1629 32	1696 34 2304	1766 36 2234	1839 37 2161	1916 38 2084	1993 39 2007	2071 39 1929	28.0
2.5	1637 36	1712 38 2288	1791 40 2209	1873 42 2127	1957 43 2043	2043 43 1957	2130 43 1870	27.5
3.0	1670 41	1754 43 2246	1842 45 2158	1933 46 2067	2026 46 1974	2119 46 1881	2212 46 1788	27.0
3.5	1726 45	1819 47 2181	1915 48 2085	2013 49 1987	2111 49 1889	2210 49 1790	2307 48 1693	26.5
4.0	1798 49	1897 50 2103	1998 51 2002	2101 51 1899	2204 51 1796	2304 50 1696	2402 48 1598	26.0
4.5	1875 51	1978 52 2022	2083 52 1917	2187 52 1813	2290 51 1710	2390 49 1610	2487 47 1513	25.5
5.0	1950 52	2055 52 1945	2160 52 1840	2263 51 1737	2364 49 1636	2461 47 1539	2552 44 1448	25.0
5.5	2016 52	2120 52 1880	2224 51 1776	2324 49 1676	2420 47 1580	2511 44 1489	2596 40 1404	24.5
6.0	2074 51	2176 50 1824	2274 49 1726	2369 46 1631	2459 43 1541	2543 40 1457	2619 36 1381	24.0
6.5	2125 49	2221 47 1779	2314 45 1686	2403 43 1597	2485 39 1515	2560 36 1440	2628 32 1372	23.5
7.0	2174 46	2264 44 1730	2351 42 1649	2432 39 1568	2506 35 1494	2573 31 1427	2631 27 1369	23.0
7.5	2226 43	2310 41 1690	2390 38 1610	2463 35 1537	2528 31 1472	2586 27 1414	2636 23 1364	22.5
8.0	2286 40	2364 37 1636	2435 34 1565	2500 30 1500	2557 27 1443	2606 23 1394	2647 18 1353	22.0
8.5	2354 36	2423 33 1577	2486 30 1514	2542 26 1458	2591 22 1409	2632 18 1368	2664 14 1336	21.5
9.0	2423 32	2484 29 1516	2538 25 1462	2585 22 1415	2624 18 1376	2656 14 1348	2681 10 1319	21.0
9.5	2483 27	2534 24 1466	2579 21 1421	2616 17 1384	2647 14 1353	2670 10 1330	2688 7 1312	20.5
10.0	2521 22	2561 19 1439	2596 16 1404	2625 13 1375	2647 10 1353	2664 7 1336	2676 4 1324	20.0
10.5	2523 17	2553 14 1447	2579 11 1421	2599 9 1401	2615 7 1385	2626 5 1374	2634 3 1366	19.5
11.0	2482 12	2504 10 1496	2522 8 1478	2537 7 1463	2548 5 1452	2557 4 1443	2564 3 1436	19.0
11.5	2400 9	2416 8 1584	2430 7 1570	2442 6 1558	2453 5 1547	2494 5 1530	2473 5 1527	18.5
12.0	2288 7	2302 7 1698	2316 7 1684	2330 7 1670	2345 7 1655	2360 8 1640	2376 8 1624	18.0
12.5	2165 8	2182 9 1818	2200 9 1800	2220 10				

TABLE 12 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	14 v	16 v	18 v	20 v	22 v	24 v	26 v	Arg.
-0.5	2204 +30 1796	2262 +28 1738	2317 +27 1683	2369 +25 1631	2417 +23 1583	2461 +21 1539	2500 +18 1500	30.5
0.0	2166 29 1834	2222 28 1778	2277 27 1723	2329 25 1671	2377 23 1623	2422 21 1578	2463 19 1537	30.0
+0.5	2130 30 1870	2188 29 1812	2245 28 1755	2300 27 1700	2352 25 1648	2401 23 1599	2446 21 1554	29.5
1.0	2109 32 1891	2172 31 1828	2234 30 1766	2294 29 1706	2352 28 1648	2406 26 1594	2456 24 1544	29.0
1.5	2114 35 1886	2184 35 1816	2252 34 1748	2318 32 1682	2382 31 1618	2442 29 1558	2497 26 1503	28.5
2.0	2150 39 1850	2227 38 1773	2302 37 1698	2375 35 1625	2444 33 1556	2508 31 1492	2567 28 1433	28.0
2.5	2215 42 1785	2299 41 1701	2380 40 1620	2457 37 1543	2530 35 1470	2596 32 1404	2657 28 1343	27.5
3.0	2303 45 1697	2391 43 1609	2475 41 1525	2555 38 1445	2628 35 1372	2695 31 1305	2754 27 1246	27.0
3.5	2401 46 1599	2491 44 1509	2576 41 1424	2654 38 1346	2726 34 1274	2789 29 1211	2843 25 1157	26.5
4.0	2496 46 1504	2585 43 1415	2667 39 1333	2741 35 1259	2807 31 1193	2864 26 1136	2911 21 1089	26.0
4.5	2577 44 1423	2661 40 1339	2738 36 1262	2806 32 1194	2864 27 1136	2912 21 1088	2950 16 1050	25.5
5.0	2637 40 1363	2714 36 1286	2783 32 1217	2842 27 1158	2891 22 1109	2929 16 1071	2956 11 1044	25.0
5.5	2673 36 1327	2742 32 1258	2801 27 1199	2850 22 1150	2889 17 1111	2917 11 1083	2934 6 1066	24.5
6.0	2688 32 1312	2746 27 1254	2796 22 1204	2835 17 1165	2864 12 1136	2882 6 1118	2889 + 1 1111	24.0
6.5	2687 27 1313	2736 22 1264	2776 17 1224	2806 12 1194	2825 7 1175	2834 + 2 1166	2833 - 3 1167	23.5
7.0	2681 22 1319	2721 18 1279	2752 13 1248	2773 8 1227	2784 + 3 1216	2786 - 1 1214	2779 6 1221	23.0
7.5	2677 18 1323	2709 14 1291	2731 9 1269	2744 4 1256	2748 + 0 1252	2744 4 1256	2732 8 1268	22.5
8.0	2679 14 1321	2703 10 1297	2718 5 1282	2725 + 1 1275	2723 - 2 1277	2715 6 1285	2699 9 1301	22.0
8.5	2689 10 1311	2705 6 1295	2713 + 2 1287	2715 - 1 1285	2709 4 1291	2698 7 1302	2681 10 1319	21.5
9.0	2698 7 1302	2708 3 1292	2711 0 1289	2709 3 1291	2700 5 1300	2687 8 1313	2670 9 1330	21.0
9.5	2699 4 1301	2704 + 1 1296	2704 - 1 1296	2698 4 1302	2689 5 1311	2677 7 1323	2661 8 1339	20.5
10.0	2682 2 1318	2684 0 1316	2682 2 1318	2677 3 1323	2669 4 1331	2659 5 1341	2648 6 1352	20.0
10.5	2638 1 1362	2639 0 1361	2638 - 1 1362	2632 - 2 1364	2623 - 3 1373	2621 - 3 1379	2621 - 3 1379	19.5
11.0	2569 2 1431	2573 + 2 1427	2576 + 1 1424	2579 + 1 1421	2581 + 1 1419	2583 + 1 1417	2586 + 1 1414	19.0
11.5	2483 5 1517	2492 5 1508	2502 5 1498	2512 5 1488	2523 5 1477	2534 6 1466	2545 6 1455	18.5
12.0	2392 9 1608	2410 9 1590	2429 9 1571	2448 10 1552	2468 10 1532	2488 10 1512	2508 10 1492	18.0
12.5	2314 13 1686	2341 13 1659	2369 14 1631	2397 14 1603	2426 14 1574	2453 14 1547	2480 13 1520	17.5
13.0	2263 17 1737	2298 18 1702	2333 18 1667	2368 17 1632	2402 17 1598	2435 16 1565	2464 14 1536	17.0
13.5	2245 20 1755	2285 20 1715	2325 19 1675	2363 18 1637	2399 17 1601	2432 15 1568	2461 13 1539	16.5
14.0	2255 21 1745	2297 20 1703	2336 19 1664	2373 17 1627	2406 15 1594	2435 13 1565	2459 11 1541	16.0
14.5	2279 20 1721	2318 18 1682	2352 16 1648	2383 14 1617	2410 12 1590	2431 9 1569	2447 7 1553	15.5
15.0	2296 17 1704	2327 15 1673	2354 12 1646	2377 10 1623	2394 8 1606	2407 5 1593	2415 + 2 1585	15.0
15.5	2287 12 1713	2310 10 1690	2328 8 1672	2342 6 1658	2351 3 1649	2356 + 1 1644	2356 - 1 1644	14.5
16.0	2242 8 1758	2256 6 1744	2267 5 1733	2274 3 1726	2278 1 1722	2278 - 1 1722	2276 2 1724	14.0
16.5	2158 6 1842	2168 4 1832	2176 3 1824	2180 2 1820	2183 1 1817	2184 0 1816	2183 - 1 1817	13.5
17.0	2050 5 1950	2060 5 1940	2069 4 1931	2077 4 1923	2085 4 1915	2092 + 3 1908	2097 + 3 1903	13.0
17.5	1939 8 2061	1954 8 2046	1970 8 2030	1986 8 2014	2003 8 1997	2020 8 1980	2037 8 1963	12.5
18.0	1845 12 2155	1870 13 2130	1897 14 2103	1925 14 2075	1954 15 2046	1984 15 2016	2014 15 1986	12.0
18.5	1789 18 2211	1827 20 2173	1868 21 2132	1909 21 2091	1952 21 2048	1995 21 2005	2038 21 1962	11.5
19.0	1783 25 2217	1834 26 2166	1888 27 2122	1942 27 2058	1997 27 2003	2052 27 1948	2106 26 1894	11.0
19.5	1825 31 2175	1888 32 2112	1953 33 2047	2018 32 1982	2083 32 1917	2146 31 1854	2207 30 1793	10.5
20.0	1906 36 2094	1980 37 2020	2053 37 1947	2126 36 1874	2197 35 1803	2265 33 1735	2330 31 1670	10.0
20.5	2010 40 1990	2090 40 1910	2169 39 1831	2246 38 1754	2320 36 1680	2389 34 1611	2454 31 1546	9.5
21.0	2124 42 1876	2208 41 1792	2289 40 1711	2367 38 1633	2441 35 1559	2509 32 1491	2571 29 1429	9.0
21.5	2235 43 1765	2319 42 1681	2401 40 1599	2478 37 1522	2550 34 1450	2614 31 1386	2672 27 1328	8.5
22.0	2332 43 1668	2417 41 1583	2497 39 1503	2572 36 1428	2639 32 1361	2699 28 1301	2751 24 1249	8.0
22.5	2414 43 1586	2498 40 1502	2575 37 1425	2646 34 1354	2709 29 1291	2764 25 1236	2809 20 1191	7.5
23.0	2482 42 1518	2563 39 1437	2638 35 1362	2704 31 1296	2762 27 1238	2810 22 1190	2848 17 1152	7.0
23.5	2539 40 1461	2617 37 1383	2687 33 1313	2748 28 1252	2799 23 1201	2841 18 1159	2872 13 1128	6.5
24.0	2589 38 1411	2662 34 1338	2727 30 1273	2782 25 1218	2827 20 1173	2861 14 1139	2885 9 1115	6.0
24.5	2635 36 1365	2702 31 1298	2760 26 1240	2808 21 1192	2846 16 1154	2872 10 1128	2888 5 1112	5.5
25.0	2676 32 1324	2736 28 1264	2787 23 1213	2827 17 1173	2856 12 1144	2875 6 1125	2882 + 1 1118	5.0
25.5	2712 28 1288	2764 24 1236	2806 18 1194	2838 13 1162	2858 8 1142	2869 + 3 1131	2869 - 3 1131	4.5
26.0	2737 24 1263	2780 19 1220	2814 14 1186	2837 9 1163	2850 4 1150	2853 - 1 1147	2846 6 1154	4.0
26.5	2749 20 1251	2783 15 1217	2809 10 1191	2824 5 1176	2830 + 1 1170	2827 4 1173	2814 8 1186	3.5
27.0	2742 16 1258	2769 11 1231	2787 7 1213	2797 3 1203	2797 - 2 1203	2790 6 1210	2774 10 1226	3.0
27.5	2717 13 1283	2739 9 1261	2752 5 1248	2757 + 1 1243	2755 3 1245	2745 6 1255	2729 10 1271	2.5
28.0	2678 10 1322	2696 7 1304	2707 4 1292	2711 0 1289	2708 3 1292	2699 6 1301	2683 9 1317	2.0
28.5	2633 10 1367	2650 7 1350	2660 4 1340	2665 + 1 1335	2663 - 2 1337	2656 5 1344	2644 7 1356	1.5
29.0	2590 10 1410	2668 8 1392	2621 5 1379	2629 2 1371	2630 0 1370	2627 3 1373	2619 5 1381	1.0
29.5	2560 12 1440	2581 10 1419	2598 7 1402	2610 4 1390	2615 + 2 1385	2616 - 1 1384	2611 4 1389	+0.5
30.0	2554 14 1446	2580 12 1420	2600 9 1400	2615 6 1385	2625 3 1375	2629 0 1371	2627 2 1373	0.0
30.5	2577 + 16 1423	2606 + 14 1394	2631 + 10 1369	2648 + 7 1352	2660 + 4 1340	2664 + 1 1336	2663 - 2 1337	-0.5
Arg.	v 237	v 235	v 233	v 231	v 229	v 227	v 225	Arg.

TABLE 12 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	28 v	30 v	32 v	34 v	36 v	38 v	40 v	Arg.
-0.5	2534 + 16 1466	2563 + 13 1437	2587 + 11 1413	2606 + 8 1394	2619 + 5 1381	2626 + 3 1374	2629 0 1371	30.5
0.0	2499 17 1501	2532 15 1468	2558 12 1442	2580 10 1420	2597 7 1403	2609 5 1391	2615 + 2 1385	30.0
+0.5	2486 19 1514	2523 17 1477	2554 14 1446	2581 12 1419	2601 9 1399	2617 6 1383	2626 3 1374	29.5
1.0	2502 22 1498	2542 19 1458	2578 17 1422	2608 13 1392	2632 10 1368	2650 7 1350	2662 4 1338	29.0
1.5	2548 24 1452	2592 21 1408	2631 18 1369	2663 14 1337	2689 11 1311	2707 7 1293	2717 3 1283	28.5
2.0	2620 25 1380	2667 22 1333	2706 18 1294	2738 14 1262	2762 10 1238	2777 6 1223	2784 + 1 1216	28.0
2.5	2710 25 1290	2756 21 1244	2793 16 1207	2822 12 1178	2841 7 1159	2851 + 3 1149	2851 - 2 1149	27.5
3.0	2804 23 1196	2846 18 1154	2878 13 1122	2900 8 1100	2912 + 3 1088	2913 - 2 1087	2905 7 1095	27.0
3.5	2887 20 1113	2922 15 1078	2946 9 1054	2959 + 4 1041	2961 - 2 1039	2952 7 1048	2934 12 1066	26.5
4.0	2947 15 1053	2972 10 1028	2987 + 4 1013	2989 - 1 1011	2981 7 1019	2962 12 1038	2933 17 1067	26.0
4.5	2976 10 1024	2991 + 5 1009	2995 - 1 1005	2987 7 1013	2968 12 1032	2940 17 1060	2900 22 1100	25.5
5.0	2972 + 5 1028	2976 - 1 1024	2970 6 1030	2952 11 1048	2925 16 1075	2887 21 1113	2841 25 1159	25.0
5.5	2939 0 1061	2934 5 1066	2918 10 1082	2892 15 1108	2857 20 1143	2814 24 1186	2762 27 1238	24.5
6.0	2886 - 4 1114	2872 9 1128	2849 14 1151	2818 18 1182	2777 22 1223	2730 25 1270	2677 28 1323	24.0
6.5	2823 8 1177	2803 12 1197						

TABLE 12 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	42 v	44 v	46 v	48 v	50 v	52 v	54 v	Arg.
d								d
-0.5	2626 - 3 1374	2617 - 5 1383	2604 - 8 1396	2587 - 10 1413	2565 - 12 1435	2538 - 14 1462	2508 - 16 1492	30.5
0.0	2616 - 1 1384	2612 4 1388	2602 6 1398	2588 8 1412	2568 11 1432	2544 13 1456	2516 15 1484	30.0
+0.5	2630 0 1370	2628 2 1372	2620 5 1380	2607 8 1393	2588 11 1412	2564 13 1436	2535 16 1465	29.5
1.0	2666 + 1 1334	2665 3 1335	2656 6 1344	2642 9 1358	2620 12 1380	2594 15 1406	2561 18 1439	29.0
1.5	2720 0 1280	2716 4 1284	2704 8 1296	2685 11 1315	2659 15 1341	2626 18 1374	2587 21 1413	28.5
2.0	2783 - 3 1217	2773 7 1227	2754 11 1246	2728 15 1272	2694 19 1306	2653 22 1347	2605 25 1395	28.0
2.5	2842 7 1158	2824 11 1176	2796 16 1204	2761 20 1239	2717 24 1283	2667 27 1333	2610 30 1390	27.5
3.0	2886 12 1114	2858 16 1142	2821 21 1179	2775 25 1225	2722 28 1278	2662 32 1338	2596 34 1404	27.0
3.5	2905 17 1095	2866 21 1134	2819 26 1181	2764 29 1235	2701 33 1299	2633 35 1367	2560 37 1440	26.5
4.0	2894 22 1106	2845 26 1155	2789 30 1211	2726 33 1274	2656 36 1344	2582 38 1418	2504 40 1496	26.0
4.5	2853 26 1147	2796 30 1204	2734 33 1266	2664 36 1336	2591 38 1409	2514 39 1486	2434 40 1566	25.5
5.0	2786 29 1214	2725 32 1275	2658 35 1342	2587 36 1413	2512 38 1488	2436 39 1564	2358 39 1642	25.0
5.5	2704 30 1296	2641 33 1359	2574 34 1426	2503 36 1497	2431 38 1569	2358 36 1642	2285 36 1715	24.5
6.0	2619 30 1381	2556 32 1444	2491 33 1509	2425 33 1575	2358 33 1642	2291 33 1709	2226 32 1774	24.0
6.5	2540 29 1460	2482 30 1518	2422 30 1578	2361 30 1639	2301 30 1699	2242 29 1758	2186 28 1814	23.5
7.0	2480 26 1520	2427 27 1573	2373 27 1627	2320 26 1680	2268 26 1732	2218 24 1782	2170 23 1830	23.0
7.5	2443 23 1557	2396 23 1604	2350 23 1650	2304 22 1696	2261 21 1739	2219 20 1781	2180 19 1820	22.5
8.0	2430 20 1570	2391 20 1609	2352 19 1648	2314 18 1686	2278 18 1722	2243 17 1757	2210 16 1790	22.0
8.5	2440 17 1560	2408 16 1592	2375 16 1625	2344 15 1656	2314 15 1686	2284 15 1716	2255 15 1745	21.5
9.0	2466 13 1534	2439 13 1561	2413 13 1587	2387 13 1613	2361 13 1639	2334 14 1666	2307 14 1693	21.0
9.5	2500 11 1500	2479 11 1521	2457 11 1543	2435 12 1565	2411 12 1589	2385 13 1615	2357 15 1643	20.5
10.0	2535 8 1465	2518 9 1482	2499 10 1501	2479 11 1521	2455 13 1545	2428 14 1572	2398 17 1602	20.0
10.5	2561 6 1439	2547 7 1453	2531 9 1469	2511 11 1489	2486 14 1514	2456 16 1544	2421 19 1579	19.5
11.0	2578 5 1422	2566 7 1434	2550 9 1450	2528 12 1472	2501 15 1499	2467 19 1533	2426 22 1574	19.0
11.5	2582 4 1418	2571 7 1429	2553 11 1447	2529 14 1471	2498 18 1502	2459 21 1541	2412 25 1588	18.5
12.0	2575 5 1425	2562 9 1438	2541 12 1459	2512 16 1488	2476 20 1524	2431 24 1569	2379 28 1621	18.0
12.5	2557 7 1443	2539 11 1461	2514 15 1486	2480 19 1520	2438 23 1562	2388 27 1612	2330 31 1670	17.5
13.0	2527 10 1473	2504 14 1496	2472 18 1528	2433 22 1567	2386 25 1614	2332 29 1668	2270 33 1730	17.0
13.5	2484 13 1516	2454 17 1546	2418 20 1582	2374 24 1626	2322 27 1678	2265 30 1735	2201 33 1799	16.5
14.0	2428 16 1572	2394 19 1606	2352 22 1648	2305 25 1695	2252 28 1748	2194 30 1806	2131 32 1869	16.0
14.5	2360 18 1640	2322 20 1678	2279 23 1721	2232 25 1768	2180 27 1820	2124 29 1876	2064 30 1936	15.5
15.0	2285 18 1715	2248 20 1752	2206 22 1794	2161 23 1839	2113 25 1887	2062 26 1938	2009 27 1991	15.0
15.5	2211 16 1789	2177 18 1823	2140 19 1860	2101 20 1899	2060 21 1940	2016 22 1984	1972 23 2028	14.5
16.0	2149 13 1851	2122 14 1878	2093 15 1907	2062 16 1938	2029 17 1971	1994 18 2006	1958 18 2042	14.0
16.5	2110 8 1890	2092 9 1908	2072 10 1928	2050 11 1950	2026 13 1974	2000 14 2000	1972 15 2028	13.5
17.0	2102 - 3 1898	2094 5 1906	2083 6 1917	2070 7 1930	2054 9 1946	2034 10 1966	2012 12 1988	13.0
17.5	2130 + 1 1870	2131 - 1 1869	2128 - 3 1872	2121 4 1879	2110 6 1890	2095 9 1905	2076 11 1924	12.5
18.0	2193 5 1807	2200 + 2 1800	2202 0 1798	2198 3 1802	2190 6 1810	2176 8 1824	2156 11 1844	12.0
18.5	2284 6 1716	2293 3 1707	2296 0 1704	2292 3 1708	2283 7 1717	2266 10 1734	2244 13 1756	11.5
19.0	2391 6 1609	2399 + 2 1601	2400 - 2 1600	2393 5 1607	2378 9 1622	2357 12 1643	2329 16 1671	11.0
19.5	2501 4 1499	2505 0 1495	2500 4 1500	2487 8 1513	2466 12 1534	2438 16 1562	2402 20 1598	10.5
20.0	2605 + 1 1395	2602 - 4 1398	2590 8 1410	2569 13 1431	2540 17 1460	2502 20 1498	2458 24 1542	10.0
20.5	2690 - 3 1310	2678 8 1322	2657 13 1343	2628 17 1372	2590 21 1410	2544 25 1456	2492 28 1508	9.5
21.0	2752 8 1248	2732 13 1268	2702 17 1298	2663 21 1337	2616 25 1384	2562 29 1438	2502 32 1498	9.0
21.5	2790 13 1210	2760 17 1240	2721 22 1279	2674 26 1326	2619 29 1381	2558 32 1442	2491 35 1509	8.5
22.0	2804 17 1196	2766 21 1234	2719 26 1281	2664 29 1336	2602 32 1398	2534 35 1466	2461 37 1539	8.0
22.5	2796 21 1204	2750 25 1250	2696 29 1304	2634 33 1366	2566 35 1434	2492 38 1508	2415 39 1585	7.5
23.0	2772 25 1228	2719 29 1281	2658 32 1342	2590 35 1410	2518 37 1482	2441 39 1559	2361 40 1639	7.0
23.5	2735 28 1265	2676 31 1324	2610 34 1390	2538 37 1462	2462 39 1538	2383 40 1617	2301 41 1699	6.5
24.0	2691 30 1309	2627 33 1373	2557 36 1443	2482 38 1518	2405 40 1595	2324 40 1676	2244 40 1756	6.0
24.5	2642 32 1358	2575 35 1425	2503 37 1497	2427 38 1573	2349 39 1651	2270 40 1730	2191 39 1809	5.5
25.0	2592 33 1408	2524 35 1476	2452 37 1548	2377 38 1623	2300 38 1700	2224 38 1776	2148 37 1852	5.0
25.5	2546 33 1454	2478 35 1522	2407 36 1593	2334 36 1666	2261 36 1739	2188 36 1812	2118 35 1882	4.5
26.0	2504 32 1496	2437 34 1563	2370 34 1630	2301 34 1699	2232 34 1768	2165 33 1835	2100 32 1900	4.0
26.5	2466 31 1534	2404 31 1596	2340 32 1660	2276 32 1724	2214 31 1786	2152 30 1848	2094 28 1906	3.5
27.0	2436 28 1564	2379 29 1621	2321 29 1679	2263 29 1737	2206 28 1794	2151 27 1849	2098 26 1902	3.0
27.5	2414 26 1586	2362 26 1638	2310 26 1690	2258 26 1742	2206 25 1794	2156 24 1844	2108 23 1892	2.5
28.0	2401 23 1599	2354 24 1646	2307 24 1693	2259 24 1741	2212 23 1788	2166 23 1834	2120 22 1880	2.0
28.5	2396 21 1604	2353 22 1647	2309 22 1691	2265 22 1735	2220 22 1780	2175 22 1825	2130 22 1870	1.5
29.0	2400 20 1600	2359 21 1641	2316 22 1684	2272 22 1728	2227 23 1773	2181 23 1819	2135 23 1865	1.0
29.5	2408 20 1592	2367 21 1633	2323 23 1677	2276 24 1724	2229 24 1771	2180 25 1820	2130 25 1870	+0.5
30.0	2421 22 1579	2376 23 1624	2328 25 1672	2278 26 1722	2226 26 1774	2172 27 1828	2118 27 1882	0.0
30.5	2432 - 24 1568	2382 - 26 1618	2328 - 28 1672	2272 - 28 1728	2214 - 29 1786	2155 - 30 1845	2095 - 30 1905	-0.5
Arg.	v 209	v 207	v 205	v 203	v 201	v 199	v 197	Arg.

TABLE 12 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	56 v	58 v	60 v	62 v	64 v	66 v	68 v	Arg.
d								d
-0.5	2475 - 17 1525	2439 - 19 1561	2400 - 20 1600	2359 - 21 1641	2316 - 22 1684	2272 - 22 1728	2226 - 23 1774	30.5
0.0	2484 17 1516	2448 19 1552	2409 20 1591	2367 22 1633	2323 23 1677	2277 24 1723	2229 24 1771	30.0
+0.5	2502 18 1498	2464 20 1536	2422 22 1578	2376 23 1624	2328 25 1672	2278 26 1722	2225 27 1775	29.5
1.0	2523 20 1477	2480 23 1520	2433 24 1567	2382 26 1618	2328 28 1672	2271 29 1729	2213 29 1787	29.0
1.5	2542 24 1458	2492 26 1508	2437 28 1563	2380 30 1620	2318 31 1682	2255 32 1745	2191 32 1809	28.5
2.0	2552 28 1448	2494 30 1506	2431 32 1569	2366 33 1634	2298 34 1702	2228 35 1772	2159 35 1841	28.0
2.5	2548 32 1452	2481 34 1519	2411 36 1589	2338 37 1662	2264 37 1736	2190 37 1810	2117 36 1883	27.5
3.0	2526 36 1474	2452 38 1548	2375 38 1625	2298 39 1702	2220 38 1780	2143 38 1857	2069 36 1931	27.0
3.5	2483 39 1517	2404 40 1596	2324 40 1676	2244 40 1756	2165 39 1835	2089 37 1911	2016 35 1984	26.5
4.0	2424 40 1576	2343 41 1657	2262 40 1738	2182 39 1818	2105 38 1895	2032 36 1968	1964 33 2036	26.0
4.5	2354 40 1646	2274 40 1726	2196 39 1804	2120 37 1880	2048 35 1952	1980 33 2020	1918 30 2082	25.5
5.0	2281 38 1719	2206 37 1794	2133 36 1867	2064 34 1936	1998 32 2002	1938 29 2062	1883 26 2117	25.0
5.5	2214 35 1786	2146 33 1854	2081 32 1919	2020 30 1980	1963 27 2037	1911 25 2089	1864 22 2136	24.

TABLE 12 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	70 v	72 v	74 v	76 v	78 v	80 v	82 v	Arg.
d								d
-0.5	2181-23 1819	2134-23 1866	2088-23 1912	2042-23 1958	1997-22 2003	1953-22 2047	1910-21 2090	30.5
0.0	2180 25 1820	2130 25 1870	2079 25 1921	2029 25 1971	1980 25 2020	1931 24 2069	1884 23 2116	30.0
+0.5	2171 27 1829	2116 27 1884	2062 28 1938	2007 27 1993	1954 27 2046	1902 26 2098	1852 24 2148	29.5
1.0	2154 30 1846	2094 30 1906	2035 30 1995	1976 29 2024	1920 28 2080	1866 26 2134	1815 25 2185	29.0
1.5	2126 32 1874	2062 32 1938	2000 31 2000	1939 29 2061	1882 28 2118	1828 26 2172	1779 23 2221	28.5
2.0	2090 34 1910	2023 33 1977	1959 31 2041	1898 29 2102	1842 27 2158	1791 24 2209	1746 21 2254	28.0
2.5	2047 35 1953	1979 33 2021	1915 31 2085	1856 28 2144	1803 25 2197	1757 22 2243	1716 18 2284	27.5
3.0	1998 34 2002	1932 32 2068	1871 29 2129	1816 26 2184	1767 23 2233	1726 19 2274	1692 15 2308	27.0
3.5	1948 33 2052	1885 30 2115	1829 27 2171	1778 23 2222	1736 20 2264	1700 16 2300	1672 12 2328	26.5
4.0	1901 30 2099	1843 27 2157	1792 24 2208	1749 20 2251	1712 17 2288	1682 13 2318	1659 10 2341	26.0
4.5	1861 27 2139	1810 24 2190	1766 20 2234	1729 17 2271	1698 14 2302	1673 11 2327	1654 8 2346	25.5
5.0	1823 23 2166	1791 20 2209	1754 17 2246	1722 15 2278	1695 12 2305	1674 10 2326	1657 8 2343	25.0
5.5	1823 20 2177	1786 17 2214	1754 15 2246	1727 13 2273	1704 11 2296	1684 9 2316	1667 8 2333	24.5
6.0	1829 17 2171	1798 15 2202	1770 13 2230	1746 12 2254	1723 11 2277	1702 10 2298	1683 9 2317	24.0
6.5	1850 15 2150	1822 14 2178	1796 13 2204	1771 12 2229	1747 12 2253	1722 12 2278	1698 12 2302	23.5
7.0	1883 14 2117	1855 14 2145	1827 14 2173	1798 14 2202	1769 15 2231	1739 16 2261	1706 17 2294	23.0
7.5	1920 15 2080	1889 16 2111	1856 17 2144	1822 18 2178	1785 19 2215	1745 21 2255	1703 22 2297	22.5
8.0	1954 18 2046	1917 20 2083	1876 21 2124	1832 23 2168	1785 24 2215	1734 26 2266	1681 28 2319	22.0
8.5	1980 23 2020	1933 24 2067	1882 26 2118	1827 28 2173	1768 31 2232	1704 32 2296	1638 34 2362	21.5
9.0	1990 28 2010	1931 30 2069	1868 33 2132	1801 35 2199	1729 37 2271	1653 39 2347	1574 40 2426	21.0
9.5	1980 34 2020	1910 36 2090	1834 39 2166	1754 41 2246	1670 43 2330	1583 44 2417	1493 45 2507	20.5
10.0	1951 40 2049	1869 42 2131	1782 44 2218	1691 47 2309	1596 48 2404	1499 49 2501	1401 49 2599	20.0
10.5	1905 45 2095	1813 47 2187	1716 49 2284	1617 50 2383	1515 51 2485	1412 51 2588	1310 51 2690	19.5
11.0	1844 48 2156	1745 50 2255	1643 52 2357	1538 52 2462	1433 53 2567	1328 52 2672	1226 51 2774	19.0
11.5	1778 50 2222	1676 52 2324	1571 52 2429	1466 52 2534	1362 52 2638	1260 50 2740	1161 48 2839	18.5
12.0	1712 51 2288	1610 51 2390	1508 51 2492	1406 50 2594	1307 49 2693	1211 47 2789	1120 44 2880	18.0
12.5	1652 49 2348	1555 48 2445	1459 48 2541	1365 46 2635	1274 44 2726	1188 41 2812	1108 39 2892	17.5
13.0	1605 45 2395	1516 44 2484	1428 43 2572	1344 41 2656	1264 39 2736	1190 36 2810	1122 32 2878	17.0
13.5	1572 40 2428	1493 39 2507	1416 37 2584	1344 35 2656	1276 32 2724	1214 29 2786	1159 26 2841	16.5
14.0	1556 35 2444	1488 33 2512	1423 32 2577	1362 29 2638	1306 27 2694	1256 23 2744	1212 20 2788	16.0
14.5	1557 30 2443	1499 28 2501	1445 26 2555	1395 24 2605	1350 21 2650	1309 19 2691	1275 16 2725	15.5
15.0	1572 25 2428	1524 23 2476	1479 22 2521	1437 20 2563	1399 18 2601	1366 16 2634	1337 13 2663	15.0
15.5	1602 22 2398	1561 20 2439	1522 19 2478	1485 18 2515	1452 16 2548	1422 14 2578	1396 12 2604	14.5
16.0	1643 19 2357	1605 19 2395	1569 18 2431	1535 17 2465	1503 15 2497	1474 14 2526	1448 13 2552	14.0
16.5	1692 19 2308	1655 18 2345	1618 18 2382	1583 17 2417	1550 16 2450	1520 15 2480	1492 13 2508	13.5
17.0	1746 20 2254	1707 20 2293	1668 19 2332	1630 19 2370	1594 18 2406	1560 16 2440	1529 15 2471	13.0
17.5	1800 21 2200	1758 22 2242	1714 21 2286	1673 20 2327	1633 20 2367	1595 18 2405	1561 16 2439	12.5
18.0	1852 24 2148	1804 24 2196	1757 23 2243	1711 23 2289	1667 21 2333	1626 20 2374	1589 17 2411	12.0
18.5	1896 27 2104	1843 26 2157	1791 26 2202	1741 24 2259	1694 23 2306	1651 21 2349	1613 18 2387	11.5
19.0	1931 29 2069	1873 28 2127	1818 27 2180	1765 26 2235	1715 23 2285	1671 21 2329	1633 17 2367	11.0
19.5	1952 31 2048	1891 30 2109	1833 28 2167	1778 26 2222	1729 23 2271	1685 20 2315	1649 16 2351	10.5
20.0	1960 32 2040	1896 31 2104	1836 29 2164	1781 26 2219	1733 23 2267	1691 19 2309	1657 15 2343	10.0
20.5	1952 33 2048	1888 31 2112	1828 29 2172	1775 25 2225	1728 22 2272	1689 17 2311	1659 13 2341	9.5
21.0	1931 33 2069	1867 31 2133	1809 28 2191	1758 24 2242	1714 20 2286	1679 15 2321	1654 10 2346	9.0
21.5	1898 32 2102	1836 30 2164	1780 26 2220	1732 22 2268	1693 18 2307	1663 13 2337	1642 8 2358	8.5
22.0	1857 32 2143	1798 28 2202	1746 24 2254	1702 20 2298	1668 15 2332	1642 10 2358	1628 5 2372	8.0
22.5	1812 30 2188	1757 26 2243	1710 22 2290	1671 17 2329	1642 12 2358	1623 7 2377	1614 2 2386	7.5
23.0	1770 27 2230	1719 23 2281	1678 19 2322	1646 14 2354	1623 9 2377	1610 4 2390	1607 1 2393	7.0
23.5	1734 24 2266	1690 20 2310	1654 16 2346	1628 11 2372	1612 6 2388	1606 1 2394	1610 4 2390	6.5
24.0	1710 21 2290	1672 17 2328	1644 12 2356	1625 8 2375	1615 3 2385	1616 2 2384	1625 7 2375	6.0
24.5	1700 18 2300	1669 13 2331	1648 9 2352	1636 4 2364	1632 0 2368	1638 5 2362	1653 9 2347	5.5
25.0	1706 14 2294	1682 10 2318	1667 6 2333	1660 1 2340	1662 3 2338	1672 7 2328	1690 11 2310	5.0
25.5	1726 11 2274	1708 7 2292	1698 3 2302	1695 0 2305	1700 4 2300	1712 8 2288	1731 11 2269	4.5
26.0	1756 9 2244	1742 6 2258	1734 2 2266	1733 1 2267	1738 4 2262	1749 7 2251	1765 9 2235	4.0
26.5	1788 8 2212	1775 5 2225	1767 2 2233	1765 0 2235	1767 2 2233	1774 4 2226	1785 6 2215	3.5
27.0	1816 9 2184	1801 6 2199	1791 4 2209	1784 2 2216	1781 1 2219	1781 1 2219	1784 2 2216	3.0
27.5	1833 10 2167	1814 9 2186	1798 7 2202	1784 6 2216	1774 5 2226	1765 4 2235	1759 3 2241	2.5
28.0	1834 13 2166	1809 12 2191	1787 11 2213	1766 10 2234	1748 9 2252	1731 8 2269	1716 7 2284	2.0
28.5	1820 16 2180	1789 15 2211	1760 14 2240	1733 13 2267	1708 12 2292	1685 11 2315	1665 10 2335	1.5
29.0	1792 18 2208	1756 17 2244	1723 16 2277	1692 15 2308	1664 13 2336	1638 12 2362	1616 10 2384	1.0
29.5	1757 20 2243	1719 18 2281	1684 16 2316	1653 15 2347	1626 13 2374	1602 11 2398	1582 9 2418	+0.5
30.0	1721 20 2279	1684 17 2316	1652 15 2348	1624 13 2376	1601 10 2399	1583 8 2417	1571 5 2429	0.0
30.5	1690 18 2310	1657 15 2343	1630 12 2370	1609 9 2391	1594 6 2406	1585 3 2415	1583 0 2417	-0.5
Arg.	v 181	v 179	v 177	v 175	v 173	v 171	v 169	Arg.

TABLE 12 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	84 v	86 v	88 v	90 v	92 v	94 v	96 v	Arg.
d								d
-0.5	1868-20 2132	1828-20 2172	1790-19 2210	1754-17 2246	1720-16 2280	1690-15 2310	1661-13 2339	30.5
0.0	1839 22 2161	1795 21 2205	1755 20 2245	1716 18 2284	1682 16 2318	1651 15 2349	1623 13 2377	30.0
+0.5	1804 23 2196	1760 21 2240	1719 19 2281	1683 17 2317	1650 15 2350	1623 13 2377	1600 10 2400	29.5
1.0	1768 22 2232	1726 20 2274	1688 18 2312	1656 15 2344	1630 12 2370	1609 9 2391	1594 6 2406	29.0
1.5	1736 20 2264	1698 17 2302	1666 14 2334	1640 11 2360	1622 8 2378	1610 4 2390	1604 1 2396	28.5
2.0	1707 18 2293	1675 14 2325	1650 11 2350	1633 7 2367	1623 3 2377	1620 0 2380	1624 4 2376	28.0
2.5	1684 15 2316	1659 11 2341	1641 7 2359	1631 3 2369	1629 0 2371	1633 4 2367	1644 7 2356	27.5
3.0	1665 12 2335	1646 8 2354	1635 4 2365	1631 0 2369	1634 3 2366	1643 6 2357	1657 8 2343	27.0
3.5	1652 9 2348	1638 5 2362	1631 2 2369	1631 1 2369	1636 4 2364	1646 6 2354	1660 8 2340	26.5
4.0	1643 7 2357	1633 4 2367	1628 1 2372	1628 1 2372	1633 3 2367	1640 5 2360	1651 6 2349	26.0
4.5	1640 6 2360	1631 4 2369	1626 2 2374	1624 0 2376	1625 1 2375	1628 2 2372	1632 2 2368	25.5
5.0	1644 6 2356	1633 4 2367	1625 3 2375	1624 0 2376	1624 0 2376	1628 2 2372	1632 2 2368	25.0
5.5	1652 7 2348	1638 6 2362	1626 6 2374	1613 6 2387	1600 7 2400	1587 7 2413	1572 8 2428	24.5
6.0	1664 9 2336	1644 10 2356	1624 10 2376	1604 11 23				

TABLE 12 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	98 v	100 v	102 v	104 v	106 v	108 v	110 v	Arg.
d								d
-0.5	1636 - 12 2364	1613 - 10 2387	1594 - 9 2406	1579 - 7 2421	1566 - 5 2434	1558 - 4 2442	1553 - 1 2447	30.5
0.0	1600 11 2400	1581 9 2419	1566 6 2434	1556 - 4 2444	1551 - 1 2449	1550 + 1 2450	1554 + 3 2446	30.0
+0.5	1583 7 2417	1571 - 5 2429	1564 - 2 2436	1564 + 1 2436	1568 + 4 2432	1579 6 2421	1594 9 2406	29.5
1.0	1586 - 2 2414	1584 0 2416	1588 + 3 2412	1599 7 2401	1615 9 2385	1636 12 2364	1663 14 2337	29.0
1.5	1606 + 2 2394	1615 + 6 2385	1630 9 2370	1650 12 2350	1676 14 2324	1707 17 2293	1742 19 2258	28.5
2.0	1634 7 2366	1652 10 2348	1674 13 2326	1702 15 2298	1735 17 2265	1771 19 2229	1810 20 2190	28.0
2.5	1661 10 2339	1683 12 2317	1710 15 2290	1741 16 2259	1775 18 2225	1812 19 2188	1849 19 2151	27.5
3.0	1677 11 2323	1700 13 2300	1727 14 2273	1756 15 2244	1786 15 2214	1818 16 2182	1849 16 2151	27.0
3.5	1677 9 2323	1698 11 2302	1720 11 2280	1743 12 2257	1766 12 2234	1789 11 2211	1811 11 2189	26.5
4.0	1663 7 2337	1677 7 2323	1690 7 2310	1704 7 2296	1717 + 6 2283	1729 + 6 2271	1740 + 5 2260	26.0
4.5	1636 + 2 2364	1641 + 2 2359	1644 + 2 2356	1647 + 1 2353	1648 0 2352	1649 0 2351	1648 - 1 2352	25.5
5.0	1600 - 3 2400	1594 - 3 2406	1586 - 4 2414	1578 - 4 2422	1568 - 5 2432	1558 - 5 2442	1546 6 2454	25.0
5.5	1557 8 2443	1540 9 2460	1522 9 2478	1503 10 2497	1484 10 2516	1464 10 2536	1445 9 2555	24.5
6.0	1508 13 2492	1480 14 2520	1452 14 2548	1424 14 2576	1396 14 2604	1369 13 2631	1344 12 2656	24.0
6.5	1448 18 2552	1412 18 2588	1375 18 2625	1339 18 2661	1305 16 2695	1273 15 2727	1244 13 2756	23.5
7.0	1377 23 2623	1332 22 2668	1288 22 2712	1246 20 2754	1208 18 2792	1173 16 2827	1143 13 2857	23.0
7.5	1291 27 2709	1238 26 2762	1189 24 2811	1143 22 2857	1102 19 2898	1066 16 2934	1037 13 2963	22.5
8.0	1187 30 2813	1130 28 2870	1077 25 2923	1029 22 2971	988 19 3012	953 15 3047	927 11 3073	22.0
8.5	1071 32 2929	1011 29 2989	956 26 3044	909 22 3091	870 17 3130	839 13 3161	818 8 3182	21.5
9.0	949 32 3051	888 28 3112	836 24 3164	791 20 3209	757 15 3243	732 10 3268	718 - 4 3282	21.0
9.5	832 31 3168	774 27 3226	726 21 3274	688 16 3312	660 11 3340	644 - 5 3356	640 0 3360	20.5
10.0	730 28 3270	679 23 3321	638 18 3366	609 12 3391	591 - 6 3409	585 0 3415	592 + 6 3408	20.0
10.5	660 24 3340	617 18 3383	587 12 3413	568 - 6 3432	562 0 3438	568 + 6 3432	587 12 3413	19.5
11.0	626 18 3374	596 12 3404	577 - 6 3423	570 0 3430	576 + 6 3424	595 12 3405	625 18 3375	19.0
11.5	637 12 3363	618 - 6 3382	612 0 3388	618 + 6 3382	636 12 3364	666 18 3334	707 23 3293	18.5
12.0	689 - 6 3311	683 0 3317	689 + 6 3311	706 11 3294	735 17 3265	774 22 3226	824 27 3176	18.0
12.5	777 0 3223	782 + 5 3218	798 11 3202	825 16 3175	862 21 3138	909 26 3091	964 30 3036	17.5
13.0	888 + 5 3112	902 10 3098	926 14 3074	959 19 3041	1001 23 2999	1052 27 2948	1110 31 2890	17.0
13.5	1008 8 2992	1028 12 2972	1057 16 2943	1094 20 2906	1138 24 2862	1189 27 2811	1247 30 2753	16.5
14.0	1124 10 2876	1148 13 2852	1178 17 2822	1216 20 2784	1260 23 2740	1310 26 2690	1365 29 2635	16.0
14.5	1226 10 2774	1249 13 2751	1280 17 2720	1316 19 2684	1357 22 2644	1404 25 2596	1456 27 2544	15.5
15.0	1305 10 2695	1328 13 2672	1356 15 2644	1389 18 2611	1428 21 2572	1472 23 2528	1520 25 2480	15.0
15.5	1363 9 2637	1383 11 2617	1409 14 2591	1440 17 2560	1477 20 2523	1519 22 2481	1565 24 2435	14.5
16.0	1403 8 2597	1421 11 2579	1446 14 2554	1476 16 2524	1512 19 2488	1553 22 2447	1600 24 2400	14.0
16.5	1432 7 2568	1450 11 2550	1475 14 2525	1506 17 2494	1543 20 2457	1587 23 2413	1637 26 2363	13.5
17.0	1458 8 2542	1478 12 2522	1505 15 2495	1539 19 2461	1580 22 2420	1629 26 2371	1684 29 2316	13.0
17.5	1488 10 2512	1512 14 2488	1544 18 2456	1583 21 2417	1630 25 2370	1685 29 2315	1748 33 2252	12.5
18.0	1528 12 2472	1556 17 2444	1594 21 2406	1641 25 2359	1696 29 2304	1758 33 2242	1829 37 2171	12.0
18.5	1575 15 2425	1611 20 2389	1656 25 2344	1710 29 2290	1773 33 2227	1844 37 2156	1923 41 2077	11.5
19.0	1629 19 2371	1652 24 2358	1678 29 2325	1708 33 2213	1758 37 2142	1830 41 2064	1916 45 1978	11.0
19.5	1686 22 2314	1736 27 2264	1796 32 2204	1865 36 2135	1942 40 2058	2026 44 1974	2118 47 1882	10.5
20.0	1738 26 2262	1795 31 2205	1861 35 2139	1935 39 2065	2017 43 1983	2106 46 1894	2201 49 1799	10.0
20.5	1786 29 2214	1848 33 2152	1918 37 2082	1997 41 2003	2082 44 1918	2173 47 1827	2268 49 1732	9.5
21.0	1824 31 2176	1889 35 2111	1963 39 2037	2044 42 1956	2130 44 1870	2221 47 1779	2316 48 1684	9.0
21.5	1852 32 2148	1920 36 2080	1996 40 2004	2078 42 1922	2164 44 1836	2254 46 1746	2347 47 1653	8.5
22.0	1875 34 2125	1945 37 2055	2022 40 1978	2103 42 1897	2189 44 1811	2277 44 1723	2366 45 1634	8.0
22.5	1897 35 2103	1969 37 2031	2045 40 1955	2126 41 1874	2209 42 1791	2293 42 1707	2378 42 1622	7.5
23.0	1922 35 2078	1993 37 2007	2068 39 1932	2147 40 1853	2227 40 1773	2307 40 1693	2386 39 1614	7.0
23.5	1951 34 2049	2022 36 1978	2095 37 1905	2170 38 1830	2245 38 1755	2320 37 1680	2393 36 1607	6.5
24.0	1984 33 2016	2052 35 1948	2121 35 1879	2191 35 1809	2260 34 1740	2328 33 1672	2392 32 1608	6.0
24.5	2015 31 1985	2078 32 1922	2141 32 1859	2204 31 1796	2264 30 1736	2323 28 1677	2377 26 1623	5.5
25.0	2035 28 1965	2090 27 1910	2144 27 1856	2197 26 1803	2248 24 1752	2295 23 1705	2338 21 1662	5.0
25.5	2034 23 1966	2079 22 1921	2122 21 1878	2163 20 1837	2201 18 1799	2236 16 1764	2267 15 1733	4.5
26.0	2004 16 1996	2036 16 1964	2067 15 1933	2095 14 1905	2120 12 1880	2143 11 1857	2163 9 1837	4.0
26.5	1941 10 2059	1960 9 2040	1978 8 2022	1994 8 2006	2009 7 1991	2021 6 1979	2032 5 1968	3.5
27.0	1851 + 4 2149	1859 4 2141	1866 3 2134	1873 3 2127	1880 3 2120	1886 3 2114	1891 3 2109	3.0
27.5	1747 0 2253	1748 + 1 2252	1749 1 2251	1751 1 2249	1754 2 2246	1758 2 2242	1764 3 2236	2.5
28.0	1652 - 1 2348	1651 0 2349	1651 1 2349	1654 2 2346	1660 3 2340	1668 5 2332	1678 6 2322	2.0
28.5	1584 0 2416	1587 + 2 2413	1592 4 2408	1601 5 2399	1614 7 2386	1630 9 2370	1649 11 2351	1.5
29.0	1562 + 4 2438	1573 6 2427	1588 8 2412	1607 10 2393	1630 12 2370	1657 14 2343	1687 16 2313	1.0
29.5	1591 10 2409	1613 12 2387	1640 14 2360	1670 16 2330	1704 18 2296	1741 20 2259	1781 21 2219	+0.5
30.0	1664 16 2336	1697 18 2303	1734 19 2266	1774 21 2226	1817 22 2183	1862 23 2138	1908 24 2092	0.0
30.5	1763 + 20 2237	1804 + 22 2196	1848 + 23 2152	1894 + 23 2106	1942 + 24 2058	1989 + 24 2011	2037 + 24 1963	-0.5
Arg.	v 153	v 151	v 149	v 147	v 145	v 143	v 141	Arg.

TABLE 12 (concl.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	112 v	114 v	116 v	118 v	120 v	122 v	124 v	126 v	Arg.
d									d
-0.5	1552 + 1 2448	1555 + 3 2445	1563 + 5 2437	1574 + 7 2426	1589 + 9 2411	1609 + 11 2391	1633 + 13 2367	1660 + 14	30.5
0.0	1563 6 2437	1577 8 2423	1595 10 2405	1618 12 2382	1644 14 2356	1676 16 2324	1710 18 2290	1748 20	30.0
+0.5	1615 11 2385	1640 14 2360	1670 16 2330	1704 18 2296	1741 20 2259	1782 21 2218	1825 22 2175	1870 23	29.5
1.0	1695 17 2305	1730 19 2270	1770 21 2230	1812 22 2188	1856 23 2144	1902 23 2098	1949 24 2051	1997 24	29.0
1.5	1781 20 2219	1823 21 2177	1867 22 2133	1912 23 2088	1959 23 2041	2005 23 1995	2051 23 1949	2096 22	28.5
2.0	1852 21 2148	1894 22 2106	1938 22 2062	1981 22 2019	2024 21 1976	2065 20 1935	2104 19 1896	2141 18	28.0
2.5	1888 19 2112	1926 19 2074	1964 19 2036	2000 18 2000	2035 17 1965	2067 16 1933	2097 14 1903	2124 13	27.5
3.0	1881 15 2119	1910 15 2090	1938 13 2062	1965 13 2035	1988 11 2012	2010 10 1990	2028 9 1972	2044 7	27.0
3.5	1831 10 2169	1850 9 2150	1866 8 2134	1881 7 2119	1894 6 2106	1904 5 2096	1913 4 2087	1921 3	26.5
4.0	1748 + 4 2252	1755 + 3 2245	1761 + 3 2239	1765 + 2 2235	1768 + 1 2232	1770 + 1 2230	1772 + 1 2228	1774 1	26.0
4.5	1645 - 1 2355	1642 - 2 2358	1638 - 2 2362	1634 - 2 2366	1630 - 2 2370	1627 - 1 2373	1625 - 1 2375	1625 1	25.5
5.0	1535 6 2465	1523 6 2477	1513 5 2487	1503 4 2497	1496 3 2504	1491 2 2509	1489 0 2511	1491 2	25.0
5.5	1426 9 2579	1409 8 2591	1395 7 2605						

TABLE 13.

Vert. Arg. D.

Hor. Arg. 17.

Arg.	0 v	1 v	2 v	3 v	4 v	5 v	6 v	Arg.
d								d
-0.5	1290-57	1231-61 769	1167-64 833	1102-66 898	1034-68 966	967-68 1033	899-66 1101	30.5
0.0	1284 58	1224 62 776	1161 65 839	1094 67 906	1027 68 973	959 68 1041	892 66 1108	30.0
+0.5	1278 59	1217 62 783	1153 65 847	1087 67 913	1019 68 981	952 67 1048	884 66 1116	29.5
1.0	1271 59	1210 63 790	1146 65 854	1079 67 921	1012 68 988	944 67 1056	877 66 1123	29.0
1.5	1263 59	1202 63 798	1138 65 862	1071 67 929	1004 67 996	937 67 1063	870 65 1130	28.5
2.0	1254 59	1193 63 807	1129 65 871	1063 67 937	996 67 1064	929 66 1071	863 65 1137	28.0
2.5	1245 59	1184 63 816	1120 65 880	1054 66 946	988 66 1012	921 66 1079	856 64 1144	27.5
3.0	1236 59	1174 62 826	1111 65 889	1045 66 955	979 66 1021	913 65 1087	849 63 1151	27.0
3.5	1225 59	1164 62 836	1101 64 899	1036 65 964	970 65 1030	905 64 1095	841 62 1159	26.5
4.0	1215 59	1154 62 846	1090 64 910	1026 65 974	961 65 1039	897 64 1103	834 62 1166	26.0
4.5	1203 59	1143 62 857	1080 64 920	1016 64 984	951 64 1049	888 63 1112	826 61 1174	25.5
5.0	1192 59	1131 62 869	1068 63 932	1004 64 996	941 63 1059	878 62 1122	817 60 1183	25.0
5.5	1180 59	1119 61 881	1056 63 944	993 63 1067	930 63 1070	868 61 1132	808 59 1192	24.5
6.0	1167 59	1107 61 893	1044 62 956	982 63 1018	919 62 1081	858 60 1142	799 58 1201	24.0
6.5	1155 59	1094 61 906	1032 62 968	970 62 1030	908 61 1092	847 60 1153	789 57 1211	23.5
7.0	1143 60	1082 62 918	1020 62 980	958 62 1042	896 61 1104	836 59 1164	779 56 1221	23.0
7.5	1130 60	1070 61 930	1008 62 992	946 62 1054	885 60 1115	825 58 1175	769 55 1231	22.5
8.0	1118 60	1057 61 943	995 62 1065	934 61 1066	873 60 1127	814 57 1186	758 54 1242	22.0
8.5	1106 60	1045 62 955	983 62 1077	922 61 1078	861 59 1139	803 57 1197	748 53 1252	21.5
9.0	1095 61	1034 62 966	972 62 1088	910 61 1090	850 59 1150	792 56 1208	737 53 1263	21.0
9.5	1084 61	1022 62 978	960 62 1100	899 61 1101	839 59 1161	781 56 1219	727 52 1273	20.5
10.0	1074 62	1012 62 988	949 62 1112	888 61 1112	828 58 1172	771 55 1229	717 52 1283	20.0
10.5	1064 62	1002 62 998	939 62 1124	878 61 1122	818 58 1182	761 55 1239	708 51 1292	19.5
11.0	1055 62	992 63 1008	929 62 1136	868 61 1132	808 58 1192	751 55 1249	698 51 1302	19.0
11.5	1047 63	983 63 1017	920 62 1148	858 61 1142	799 58 1201	742 55 1258	689 50 1311	18.5
12.0	1039 64	975 64 1025	912 63 1160	850 61 1150	790 58 1210	733 55 1267	681 50 1319	18.0
12.5	1031 64	967 64 1033	904 63 1172	841 61 1159	782 58 1218	725 54 1275	673 50 1327	17.5
13.0	1025 64	960 64 1040	896 63 1184	834 61 1166	774 58 1226	718 54 1282	666 50 1334	17.0
13.5	1018 65	954 64 1046	889 63 1196	827 61 1173	767 58 1233	711 54 1289	659 49 1341	16.5
14.0	1012 65	947 65 1053	883 63 1208	820 61 1180	761 58 1239	705 54 1295	653 49 1347	16.0
14.5	1006 65	941 65 1059	877 63 1216	814 61 1186	755 58 1245	699 54 1301	648 49 1352	15.5
15.0	1000 65	935 65 1065	871 63 1224	809 61 1191	749 57 1251	694 53 1306	643 48 1357	15.0
15.5	994 65	929 64 1071	865 63 1232	803 60 1197	744 57 1256	689 53 1311	639 48 1361	14.5
16.0	988 65	923 64 1077	860 63 1240	798 60 1202	740 56 1260	685 52 1315	635 47 1365	14.0
16.5	982 65	917 64 1083	854 62 1246	793 59 1207	735 56 1265	681 51 1319	632 46 1368	13.5
17.0	975 64	911 63 1089	848 62 1252	788 59 1212	731 55 1269	678 51 1322	629 45 1371	13.0
17.5	969 64	905 63 1095	843 61 1257	783 58 1217	726 54 1274	674 50 1326	626 45 1374	12.5
18.0	961 64	898 62 1102	836 60 1262	777 57 1223	722 54 1278	670 49 1330	623 44 1377	12.0
18.5	953 63	891 62 1109	830 60 1267	771 57 1229	716 53 1284	666 48 1334	620 43 1380	11.5
19.0	945 62	883 61 1117	823 59 1272	765 56 1235	711 52 1289	661 47 1339	617 42 1383	11.0
19.5	936 62	874 61 1126	815 58 1277	758 55 1242	705 51 1295	656 46 1344	613 40 1387	10.5
20.0	926 62	865 60 1135	806 58 1282	750 54 1250	698 50 1302	650 45 1350	608 39 1392	10.0
20.5	916 61	855 59 1145	797 57 1287	742 53 1257	690 49 1310	644 44 1356	603 38 1397	9.5
21.0	905 61	845 59 1155	787 56 1292	733 52 1264	683 48 1317	637 43 1363	597 37 1403	9.0
21.5	894 60	834 58 1166	777 55 1297	723 52 1271	674 47 1326	629 42 1371	590 36 1410	8.5
22.0	882 60	823 58 1177	766 55 1302	713 51 1278	665 46 1335	621 41 1379	583 35 1417	8.0
22.5	870 60	811 57 1189	755 54 1307	703 50 1287	655 45 1345	612 40 1388	576 33 1424	7.5
23.0	857 60	799 57 1201	743 54 1312	692 49 1296	645 44 1355	603 38 1397	568 32 1432	7.0
23.5	845 59	787 57 1213	732 53 1317	681 48 1305	635 43 1365	594 37 1406	560 31 1440	6.5
24.0	833 59	775 56 1225	720 52 1320	670 48 1310	624 42 1376	585 36 1415	551 30 1449	6.0
24.5	820 59	763 56 1237	708 52 1325	658 47 1318	614 42 1386	575 36 1425	543 29 1457	5.5
25.0	808 59	751 56 1249	697 52 1330	647 47 1323	603 41 1397	565 35 1435	534 28 1466	5.0
25.5	797 59	739 56 1261	685 51 1335	636 46 1334	593 40 1407	556 34 1444	525 27 1475	4.5
26.0	785 59	728 56 1272	674 51 1340	626 46 1342	583 40 1417	546 33 1454	517 26 1483	4.0
26.5	775 59	717 55 1283	664 51 1346	616 45 1351	573 39 1427	537 32 1463	508 25 1492	3.5
27.0	764 59	707 55 1293	654 50 1354	606 45 1360	564 39 1436	529 32 1471	501 24 1499	3.0
27.5	755 59	697 55 1303	644 50 1362	597 44 1403	555 38 1445	521 31 1479	493 24 1507	2.5
28.0	746 59	688 55 1312	636 50 1370	588 44 1412	548 37 1452	514 30 1486	487 23 1513	2.0
28.5	737 59	680 55 1320	628 49 1377	581 43 1419	541 37 1459	508 30 1492	482 22 1518	1.5
29.0	729 59	672 54 1328	620 49 1386	574 43 1426	535 36 1465	502 29 1498	477 21 1523	1.0
29.5	722 59	666 54 1334	614 48 1394	569 42 1431	530 35 1470	498 28 1502	474 20 1526	+0.5
30.0	716 58	660 53 1340	609 48 1401	564 42 1436	526 35 1474	495 27 1505	471 19 1529	0.0
30.5	710-57	654-53 1346	604-47 1406	560-41 1440	523-34 1477	493-26 1507	470-18 1530	-0.5
Arg.		v 50	v 49	v 48	v 47	v 46	v 45	Arg.

TABLE 13 (cont.).

Vert. Arg. D.

Hor. Arg. 17.

Arg.	7 v	8 v	9 v	10 v	11 v	12 v	13 v	Arg.
d								d
-0.5	834-64 1166	770-61 1230	711-58 1289	655-53 1345	605-47 1395	561-41 1439	524-34 1476	30.5
0.0	826 64 1174	763 61 1237	704 57 1296	649 52 1351	599 47 1401	556 40 1444	519 33 1481	30.0
+0.5	819 64 1181	756 61 1244	698 57 1302	643 52 1357	594 46 1406	551 39 1449	515 32 1485	29.5
1.0	812 64 1188	750 60 1250	692 56 1308	638 51 1362	590 45 1410	548 39 1452	513 31 1487	29.0
1.5	806 63 1194	744 60 1256	686 55 1314	634 50 1366	586 44 1414	545 38 1455	511 30 1489	28.5
2.0	799 62 1201	738 59 1262	682 54 1318	630 49 1370	583 43 1417	543 37 1457	510 29 1490	28.0
2.5	793 62 1207	733 58 1267	677 53 1323	626 48 1374	581 42 1419	542 36 1458	510 28 1490	27.5
3.0	787 61 1213	728 57 1272	673 52 1327	623 47 1377	579 41 1421	541 34 1459	510 27 1490	27.0
3.5	780 60 1220	722 56 1278	668 51 1332	620 46 1380	577 40 1423	540 33 1460	511 26 1489	26.5
4.0	774 59 1226	717 55 1283	664 50 1336	617 45 1383	575 38 1425	540 32 1460	512 25 1488	26.0
4.5	766 58 1234	711 54 1289	659 49 1341	613 43 1387	573 37 1427	539 30 1461	512 23 1488	25.5
5.0	759 56 1241	704 52 1296	654 47 1346	609 42 1391	570 36 1430	538 29 1462	512 22 1488	25.0
5.5	751 55 1249	697 51 1303	649 46 1351	605 40 1395	568 34 1432	537 27 1463	513 20 1487	24.5
6.0	742 54 1258	690 50 1310	643 45 1357	601 39 1399	565 33 1435	535 26 1465	513 19 1487	24.0
6.5	734 53 1266	683 49 1317	636 44 1364	596 38 1404	561 31 1439	533 24 1467	512 17 1488	23.5
7.0	725 52 1275	675 48 1325	630 42 1370	590 36 1410	557 30 1443	530 23 1470	511 16 1489	23.0
7.5	716 51 1284	666 46 1334	623 41 1377	584 35 1416	553 28 1447	528 21 1472	510 14 1490	22.5
8.0	706 50 1294	658 45 1342	615 40 1385	578 34 1422	548 27 1452	524 20 1476	508 13 1492	22.0
8.5	696 49 1304	649 44 1351	608 39 1392	5				

TABLE 13 (cont.).

Vert. Arg. D.

Hor. Arg. 17.

Arg.	14 v	15 v	16 v	17 v	18 v	19 v	20 v	Arg.
-0.5	493-26 1507	471-19 1529	456-10 1544	450-2 1550	452+6 1548	462+14 1538	481+22 1519	30.5
0.0	489 26 1511	468 18 1532	454 10 1546	448-1 1552	451 7 1549	463 15 1537	482 23 1518	30.0
+0.5	487 25 1513	466 17 1534	453 9 1547	448 0 1552	452 8 1548	464 16 1536	485 24 1515	29.5
1.0	485 24 1515	465 16 1535	453 8 1547	450+1 1550	454 9 1546	467 17 1533	488 25 1512	29.0
1.5	484 23 1516	465 15 1535	454 7 1546	452 2 1548	458 10 1542	472 18 1528	494 26 1506	28.5
2.0	484 22 1516	466 14 1534	457 6 1543	455 3 1545	462 11 1538	476 19 1524	499 27 1501	28.0
2.5	485 21 1515	468 13 1532	460 5 1540	459 4 1541	467 12 1533	483 20 1517	506 27 1494	27.5
3.0	487 20 1513	471 12 1529	464 4 1536	464 5 1536	473 13 1527	489 20 1511	514 28 1486	27.0
3.5	489 18 1511	474 10 1526	468 2 1532	470 6 1530	479 14 1521	497 21 1503	522 29 1478	26.5
4.0	491 17 1509	478 9 1522	472-1 1528	475 7 1525	486 15 1514	505 22 1495	531 30 1469	26.0
4.5	492 16 1508	481 8 1519	477 0 1523	481 8 1519	493 16 1507	512 23 1488	539 30 1461	25.5
5.0	494 14 1506	484 6 1516	482+1 1518	487 9 1513	500 17 1500	521 24 1479	549 31 1451	25.0
5.5	496 13 1504	487 5 1513	486 3 1514	493 11 1507	507 18 1493	529 25 1471	558 32 1442	24.5
6.0	498 11 1502	490 4 1510	491 4 1509	499 12 1501	514 19 1486	537 27 1463	567 33 1433	24.0
6.5	499 10 1501	493 2 1507	494 6 1506	504 13 1496	521 21 1479	545 28 1455	576 34 1424	23.5
7.0	499 8 1501	495-1 1505	498 7 1502	509 15 1491	527 22 1473	553 29 1447	585 35 1415	23.0
7.5	499 7 1501	496+1 1504	501 9 1499	514 16 1486	533 23 1467	560 30 1440	593 37 1407	22.5
8.0	499 5 1501	498 2 1502	504 10 1496	518 18 1482	539 25 1461	567 31 1433	602 38 1398	22.0
8.5	498 4 1502	498 4 1502	506 11 1494	522 19 1478	544 26 1456	573 33 1411	609 39 1391	21.5
9.0	497 2 1503	499 5 1501	508 13 1492	525 20 1475	549 27 1451	579 34 1421	616 40 1384	21.0
9.5	496-1 1504	499 7 1501	509 14 1491	527 22 1473	552 29 1448	584 35 1416	623 41 1377	20.5
10.0	494 0 1506	498 8 1502	510 16 1490	529 23 1471	556 30 1444	589 36 1411	629 42 1371	20.0
10.5	492+2 1508	497 9 1503	510 17 1490	531 24 1469	559 31 1441	593 38 1407	634 43 1366	19.5
11.0	489 3 1511	496 11 1504	510 18 1490	532 25 1468	561 32 1439	597 39 1403	638 44 1362	19.0
11.5	486 4 1514	494 12 1506	510 19 1490	533 27 1467	563 33 1437	600 40 1400	642 45 1358	18.5
12.0	484 5 1516	493 13 1507	509 20 1491	533 28 1467	564 34 1436	602 41 1398	646 46 1354	18.0
12.5	481 6 1519	491 14 1509	509 21 1491	534 29 1466	566 35 1434	605 42 1395	649 47 1351	17.5
13.0	479 7 1521	490 15 1510	508 22 1492	534 30 1466	568 36 1432	607 43 1393	653 48 1347	17.0
13.5	477 8 1523	489 16 1511	508 23 1492	535 30 1465	569 37 1431	610 43 1390	656 49 1344	16.5
14.0	476 9 1524	489 16 1511	509 24 1491	537 31 1463	571 38 1429	613 44 1387	660 50 1340	16.0
14.5	476 9 1524	489 17 1511	510 25 1490	538 32 1462	574 39 1426	616 45 1384	663 50 1337	15.5
15.0	476 10 1524	490 18 1510	512 25 1488	541 33 1459	577 39 1423	620 45 1380	668 51 1332	15.0
15.5	478 11 1522	492 18 1508	515 26 1485	544 33 1456	581 40 1419	624 46 1376	673 51 1327	14.5
16.0	480 11 1520	495 19 1505	518 27 1482	549 34 1451	586 40 1414	629 46 1371	678 52 1322	14.0
16.5	483 12 1517	499 20 1501	523 27 1477	554 34 1446	591 41 1409	635 47 1365	684 52 1316	13.5
17.0	487 13 1513	504 20 1496	528 28 1472	559 35 1441	597 41 1403	642 47 1358	691 52 1309	13.0
17.5	491 14 1509	509 21 1491	533 28 1467	565 35 1435	604 42 1396	648 47 1352	698 52 1302	12.5
18.0	496 14 1504	514 22 1486	540 29 1460	572 36 1428	611 42 1389	656 48 1344	706 52 1294	12.0
18.5	501 15 1499	520 23 1480	546 30 1454	580 36 1420	619 42 1381	664 48 1336	715 53 1285	11.5
19.0	506 16 1494	526 24 1474	553 31 1447	587 37 1413	627 43 1373	673 48 1327	724 53 1276	11.0
19.5	511 17 1489	532 25 1468	560 31 1440	595 38 1405	636 44 1364	682 49 1318	734 53 1266	10.5
20.0	516 18 1484	538 26 1462	567 32 1433	603 39 1397	645 44 1355	692 49 1308	743 54 1257	10.0
20.5	521 20 1479	545 27 1455	575 33 1425	611 40 1389	654 45 1346	702 50 1298	754 54 1246	9.5
21.0	526 21 1474	551 28 1449	582 34 1418	620 40 1380	663 46 1337	712 51 1288	764 55 1236	9.0
21.5	531 22 1469	557 29 1443	589 36 1411	628 41 1372	672 47 1328	721 51 1279	775 55 1225	8.5
22.0	535 24 1465	562 30 1438	596 37 1404	636 43 1364	681 48 1319	732 52 1268	786 56 1214	8.0
22.5	539 25 1461	568 32 1432	603 38 1397	644 44 1356	690 49 1310	742 53 1258	797 57 1203	7.5
23.0	543 26 1457	573 33 1427	609 39 1391	652 45 1348	699 50 1301	751 54 1249	807 57 1193	7.0
23.5	546 28 1454	578 35 1422	615 41 1385	659 46 1341	708 51 1292	761 55 1239	818 58 1182	6.5
24.0	549 29 1451	582 36 1418	621 42 1379	666 47 1334	716 52 1284	770 56 1230	828 59 1172	6.0
24.5	551 31 1449	586 37 1414	626 43 1374	672 49 1328	724 53 1276	779 57 1221	838 60 1162	5.5
25.0	553 32 1447	589 39 1411	631 45 1369	678 50 1322	731 54 1269	787 58 1213	847 61 1153	5.0
25.5	555 34 1445	592 40 1408	635 46 1365	684 51 1316	738 56 1262	796 59 1204	856 62 1144	4.5
26.0	556 35 1444	595 42 1405	640 47 1360	690 52 1310	745 57 1255	803 60 1197	865 63 1135	4.0
26.5	558 36 1442	598 43 1402	644 49 1356	695 54 1305	751 58 1249	810 61 1190	873 64 1127	3.5
27.0	559 38 1441	600 44 1400	647 50 1353	700 55 1300	757 59 1243	817 62 1183	881 64 1119	3.0
27.5	560 39 1440	603 45 1397	651 51 1349	705 56 1295	763 60 1237	824 63 1176	888 65 1112	2.5
28.0	562 40 1438	606 46 1394	655 52 1345	710 57 1290	768 61 1232	831 64 1169	896 66 1104	2.0
28.5	565 41 1435	609 47 1391	660 53 1340	715 58 1285	774 61 1226	838 64 1162	903 66 1097	1.5
29.0	568 42 1432	613 48 1387	664 54 1336	720 58 1280	781 62 1219	844 65 1156	910 67 1090	1.0
29.5	572 43 1428	618 49 1382	670 54 1330	726 59 1274	787 62 1213	851 65 1149	918 67 1082	+0.5
30.0	576 43 1424	623 50 1377	676 55 1324	733 59 1267	794 63 1206	859 66 1141	925 67 1075	0.0
30.5	582+44 1418	630+50 1370	682+55 1318	740+60 1260	802+63 1198	866+66 1134	933+67 1007	-0.5
Arg.	v 37	v 36	v 35	v 34	v 33	v 32	v 31	Arg.

TABLE 13 (concl.).

Vert. Arg. D.

Hor. Arg. 17.

Arg.	21 v	22 v	23 v	24 v	25 v	Arg.
-0.5	507+30 1493	541+37 1459	582+44 1418	629+50 1371	681+55 1319	30.5
0.0	509 31 1491	544 38 1456	586 45 1414	633 51 1367	687 56 1313	30.0
+0.5	513 32 1487	548 39 1452	591 45 1409	639 51 1361	693 56 1307	29.5
1.0	518 33 1482	554 40 1446	597 46 1403	646 52 1354	700 57 1300	29.0
1.5	523 33 1477	560 40 1440	604 47 1396	653 52 1347	708 57 1292	28.5
2.0	530 34 1470	567 41 1433	611 47 1389	661 52 1339	716 57 1284	28.0
2.5	537 35 1463	575 41 1425	620 47 1380	670 53 1330	725 57 1275	27.5
3.0	546 35 1454	584 42 1416	629 48 1371	680 53 1320	735 57 1265	27.0
3.5	554 36 1446	594 42 1406	639 48 1361	690 53 1310	745 58 1255	26.5
4.0	564 36 1436	604 43 1396	649 48 1351	700 53 1300	756 58 1244	26.0
4.5	573 37 1427	614 43 1386	660 49 1340	712 54 1288	767 58 1233	25.5
5.0	584 38 1416	625 44 1375	672 49 1328	723 54 1277	779 58 1221	25.0
5.5	594 39 1406	635 45 1365	683 50 1317	735 54 1265	791 58 1209	24.5
6.0	604 40 1396	646 45 1354	694 50 1306	747 54 1253	803 58 1197	24.0
6.5	614 40 1386	657 46 1343	706 51 1294	759 55 1241	816 58 1184	23.5
7.0	624 41 1376	668 47 1332	717 51 1283	771 55 1229	828 58 1172	23.0
7.5	633 42 1367	678 48 1322	728 52 1272	782 56 1218	840 59 1160	22.5
8.0	642 43 1358	688 48 1312	739 53 1261	794 56 1206	852 59 1148	22.0
8.5	651 44 1349	698 49 1302	750 54 1250	805 57 1195	864 59 1136	21.5
9.0	659 45 1341	707 50 1293	760 54 1240	816 58 1184	875 60 1125	21.0
9.5	667 47 1333	716 51 1284	769 55 1231	826 58 1174	885 60 1115	20.5
10.0	674 48 1326	724 52 1276	778 56 1222	836 59 1164	896 61 1104	20.0
10.5	680 49 1320	731 53 1269	786 57 1214	844 59 1156	905 61 1095	19.5
11						

TABLE 14.

Vert. Arg. D.

Hor. Arg. 18.

Arg.	0 v	1 v 20	2 v 21	3 v 22	4 v 23	5 v 24	6 v 25	7 v 26	Arg.
d									d
-0.5	19+10	30+12 170	43+13 157	57+15 143	72+16 128	88+16 112	105+16 95	121+16 79	30.5
0.0	27 11	39 13 161	53 15 147	68 16 132	84 16 116	101 16 99	117 16 83	133 16 67	30.0
+0.5	36 13	49 14 151	64 15 136	80 16 120	97 16 103	113 16 87	129 16 71	145 15 55	29.5
1.0	46 14	60 15 140	76 16 124	92 16 108	109 16 91	125 16 75	141 15 59	155 14 45	29.0
1.5	57 15	72 16 128	88 16 112	105 16 95	121 16 79	137 15 63	152 14 48	165 12 35	28.5
2.0	69 15	85 16 115	101 16 99	117 16 83	133 15 67	148 14 52	161 13 39	173 11 27	28.0
2.5	81 16	98 16 102	114 16 86	129 15 71	144 14 56	158 13 42	170 11 30	181 9 19	27.5
3.0	94 16	110 16 90	126 15 74	141 15 59	155 13 45	167 12 33	178 10 22	186 7 14	27.0
3.5	107 16	122 15 78	137 15 63	152 13 48	164 12 36	175 10 25	184 8 16	191 5 9	26.5
4.0	119 15	134 15 66	149 14 51	162 12 38	173 10 27	182 8 18	189 6 11	193 3 7	26.0
4.5	131 15	146 14 54	159 12 41	170 10 30	180 8 20	187 6 13	192 4 8	194+ 1 6	25.5
5.0	143 14	156 12 44	168 11 32	178 9 22	185 7 15	191 4 9	194+ 2 6	194- 1 6	25.0
5.5	154 13	166 11 34	176 9 24	184 7 16	190 5 10	193+ 2 7	192 3 8	192 3 8	24.5
6.0	163 11	174 9 26	182 7 18	188 5 12	192+ 2 8	193 0 7	192- 3 8	188 5 12	24.0
6.5	172 10	180 8 20	187 5 13	191 3 9	193 0 7	192- 2 8	188 5 12	183 7 17	23.5
7.0	179 8	186 6 14	190 3 10	192+ 1 8	192- 2 8	189 4 11	184 7 16	176 9 24	23.0
7.5	185 6	190 4 10	192+ 1 8	192- 1 8	189 4 11	184 6 16	177 8 23	168 10 32	22.5
8.0	189 4	192+ 2 8	192- 1 8	190 3 10	185 6 15	178 8 22	169 10 31	158 12 42	22.0
8.5	191+ 2	192 0 8	190 3 10	186 5 14	180 8 20	171 10 29	160 11 40	148 13 52	21.5
9.0	192 0	191- 3 9	187 5 13	181 7 19	173 9 27	162 11 38	150 13 50	137 14 63	21.0
9.5	192- 2	188 5 12	182 7 18	174 9 26	164 11 36	152 13 48	139 14 61	125 15 75	20.5
10.0	189 4	184 7 16	176 9 24	166 11 34	155 12 45	142 14 58	128 15 72	112 15 88	20.0
10.5	185 6	178 8 22	168 10 32	157 12 43	144 14 56	130 14 70	115 15 85	100 15 100	19.5
11.0	180 8	171 10 29	160 12 40	147 13 53	133 14 67	118 15 82	103 15 97	87 15 113	19.0
11.5	173 10	162 12 38	150 13 50	136 14 64	121 15 79	106 16 94	90 15 110	75 15 125	18.5
12.0	165 11	153 13 47	139 14 61	124 15 76	109 16 91	93 16 107	78 15 122	63 14 137	18.0
12.5	156 13	142 14 58	128 15 72	112 16 88	97 16 103	81 15 119	66 15 134	52 14 148	17.5
13.0	146 14	131 15 69	116 16 84	100 16 100	84 16 116	69 15 131	54 14 146	41 12 159	17.0
13.5	135 15	120 16 80	104 16 96	88 16 112	72 15 128	57 14 143	44 13 156	31 11 169	16.5
14.0	124 16	108 16 92	92 16 108	76 16 124	61 15 139	47 13 153	34 12 166	23 10 177	16.0
14.5	112 16	96 16 104	80 16 120	64 15 136	50 14 150	37 12 163	25 10 175	16 8 184	15.5
15.0	100 16	84 16 116	68 15 132	53 14 147	40 13 160	28 11 172	18 9 182	10 6 190	15.0
15.5	88 16	72 15 128	57 14 143	43 13 157	31 11 169	20 9 180	12 7 188	6 5 194	14.5
16.0	76 16	61 15 139	47 13 153	34 12 166	23 10 177	14 8 186	8 5 192	4 3 196	14.0
16.5	65 15	50 14 150	37 12 163	26 10 174	17 8 183	10 6 190	5 3 195	3- 1 197	13.5
17.0	54 14	41 12 159	29 11 171	19 9 181	12 6 188	7 4 193	4- 1 196	4+ 1 196	13.0
17.5	44 13	32 11 168	22 9 178	14 7 186	8 4 192	5- 2 195	4+ 1 196	6 3 194	12.5
18.0	35 11	24 9 176	16 7 184	10 5 190	6- 2 194	5 0 195	6 3 194	11 5 189	12.0
18.5	27 10	18 8 182	12 5 188	7 3 193	6 0 194	7+ 2 193	10 5 190	10 7 184	11.5
19.0	20 8	13 6 187	9 3 191	6- 1 193	7+ 2 193	10 4 190	15 7 185	23 9 177	11.0
19.5	15 6	10 4 190	7- 1 193	7+ 1 193	10 4 190	15 6 185	22 8 178	31 10 169	10.5
20.0	11 4	8- 2 192	7+ 1 193	9 3 191	14 6 186	21 8 179	30 10 170	41 12 159	10.0
20.5	8- 2	8 0 192	9 3 191	13 5 187	20 8 180	28 10 172	39 11 161	51 13 149	9.5
21.0	8 0	9+ 2 191	13 5 187	19 7 181	27 9 173	37 11 163	49 13 151	62 14 138	9.0
21.5	9+ 2	12 4 188	18 7 182	26 9 174	36 11 164	47 12 153	60 14 140	75 15 125	8.5
22.0	11 4	16 6 184	24 9 176	34 11 166	45 12 155	58 14 142	72 14 128	87 15 113	8.0
22.5	15 6	23 8 177	32 10 168	43 12 157	56 13 144	70 14 130	84 15 116	100 15 100	7.5
23.0	21 8	30 10 170	41 12 159	54 13 146	67 14 133	82 15 118	97 15 103	112 15 88	7.0
23.5	28 10	39 12 161	51 13 149	65 14 135	79 15 121	95 15 105	110 15 90	125 15 75	6.5
24.0	37 11	49 13 151	62 14 138	77 15 123	92 15 108	107 15 93	123 15 77	137 14 63	6.0
24.5	46 13	60 14 140	74 15 126	89 15 111	105 15 95	120 15 80	135 14 65	149 13 51	5.5
25.0	57 14	72 15 128	87 15 113	102 15 98	118 15 82	142 15 68	147 14 53	160 12 40	5.0
25.5	69 15	84 15 116	99 16 101	115 15 85	130 15 70	145 14 55	158 12 42	169 11 31	4.5
26.0	81 15	96 16 104	112 16 88	128 15 72	142 14 58	156 13 44	168 11 32	178 9 22	4.0
26.5	93 16	109 16 91	125 15 75	140 14 60	154 13 46	166 12 34	177 10 23	185 7 15	3.5
27.0	106 16	122 16 78	137 15 63	152 14 48	164 12 36	176 10 24	184 8 16	191 6 9	3.0
27.5	119 16	134 15 66	149 14 51	162 12 38	174 11 26	183 8 17	191 6 9	196 4 4	2.5
28.0	131 15	146 14 54	160 13 40	172 11 28	182 9 18	190 7 10	195 4 5	198+ 2 2	2.0
28.5	143 15	157 13 43	170 12 30	180 10 20	189 7 11	195 5 5	198+ 2 2	199- 1 1	1.5
29.0	154 14	167 12 33	178 10 22	187 8 13	194 5 6	198 3 2	200 0 0	198 3 2	1.0
29.5	164 13	176 11 24	186 9 14	193 6 7	198 3 2	200+ 1 0	199- 2 1	196 5 4	+0.5
30.0	173 11	183 9 17	191 7 9	197 4 3	200+ 1 0	200- 1 0	197- 4 3	192 6 8	0.0
30.5	181+10	189+ 7 11	195+ 5 5	199+ 2 2	200- 1 0	198- 3 2	193- 6 7	186- 8 14	-0.5
Arg.	19 v	18 v 37	17 v 36	16 v 35	15 v 34	14 v 33	13 v 32	12 v 31	Arg.

TABLE 14 (concl.). Vert. Arg. D. Hor. Arg. 18.

TABLE 15.

Vert. Arg. D.

Hor. Arg. 19 + a (p. 46).

Arg.	8 v 27	9 v 28	Arg.	Arg.	0 v	1 v 39	2 v 40	3 v 41	Arg.
d			d	d					d
-0.5	137+15 63	152+14 48	30.5	-0.5	606+60	667+62 1333	731+65 1269	796+66 1204	30.5
0.0	148 14 52	162 13 38	30.0	0.0	702 64	766 65 1234	832 67 1168	900 68 1100	30.0
+0.5	159 13 41	171 12 29	29.5	+0.5	802 67	869 67 1131	936 68 1064	1005 68 995	29.5
1.0	168 12 32	179 10 21	29.0	1.0	905 68	973 68 1027	1042 68 958	1110 68 890	29.0
1.5	176 10 24	186 8 14	28.5	1.5	1010 68	1078 68 922	1146 67 854	1213 66 787	28.5
2.0	183 9 17	191 6 9	28.0	2.0	1114 68	1181 67 810	1248 66 752	1313 64 687	28.0
2.5	189 7 11	194 4 6	27.5	2.5	1216 67	1282 65 718	1346 63 654	1408 60 592	27.5
3.0	192 5 8	196+ 2 4	27.0	3.0	1314 65	1378 62 622	1438 59 562	1496 56 504	27.0
3.5	195 3 5	196 0 4	26.5	3.5	1408 61	1468 58 532	1524 55 476	1578 51 422	26.5
4.0	195+ 1 5	195- 2 5	26.0	4.0	1495 58	1551 54 449	1603 50 397	1651 46 349	26.0
4.5	194- 1 6	192 4 8	25.5	4.5	1575 53	1626 49 374	1672 44 328	1714 39 286	25.5
5.0	192 4 8	187 6 13	25.0	5.0	1647 47	1692 43 308	1733 38 267	1768 33 232	25.0
5.5	188 6 12	181 8 19	24.5	5.5	1710 41	1749 36 251	1783 31 217	1812 26 188	24.5
6.0	182 7 18	173 9 27	24.0	6.0	1764 35	1796 29 204	1823 24 177	1844 18 156	24.0
6.5	174 9 26	164 11 36	23.5	6.5	1808 28	1833 22 167	1852 16 148	1866 11 134	23.5
7.0	166 11 34	154 12 46	23.0	7.0	1841 20	1858 15 142	1870 9 130	1876+ 3 124	23.0
7.5	156 12 44	144 13 56	22.5	7.5	1863 13	1873+ 7 127	1877+ 1 123	1875- 5 125	22.5
8.0	146 13 54	132 14 68	22.0	8.0	1875+ 5	1877- 1 123	1873- 7 127	1864 13 136	22.0
8.5	134 14 66	120 15 80	21.5	8.5	1870 8	130 1858 14	142 1841 20	159 2159 21	21.5
9.0	122 15								

TABLE 15 (cont.).

Vert. Arg. D.

Hor. Arg. 19 + a (p. 46).

Arg.	4 v 42	5 v 43	6 v 44	7 v 45	8 v 46	9 v 47	10 v 48	Arg.
d								d
-0.5	863+67 1137	931+68 1069	999+68 1001	1067+68 933	1135+67 865	1202+66 798	1268+65 732	30.5
0.0	968 68 1032	1036 68 964	1104 68 896	1171 67 829	1237 65 763	1302 63 698	1364 61 636	30.0
+0.5	1073 68 927	1140 67 860	1207 66 793	1272 64 728	1336 62 664	1397 60 603	1455 57 545	29.5
1.0	1177 67 823	1243 65 757	1308 63 692	1370 61 630	1430 58 570	1487 55 513	1540 52 460	29.0
1.5	1278 64 722	1342 62 658	1403 60 597	1462 57 538	1517 54 483	1569 50 431	1617 46 383	28.5
2.0	1375 61 625	1436 59 564	1493 56 507	1546 52 454	1597 48 403	1643 44 357	1684 39 316	28.0
2.5	1407 57 533	1522 54 478	1575 50 425	1623 46 377	1667 42 333	1707 37 293	1742 32 258	27.5
3.0	1551 53 449	1602 49 398	1648 44 352	1691 40 309	1728 35 272	1761 30 236	1788 25 212	27.0
3.5	1627 47 373	1672 43 328	1713 38 287	1748 33 252	1779 28 221	1804 22 191	1824 17 176	26.5
4.0	1694 41 306	1733 36 267	1766 31 234	1795 26 205	1818 20 182	1836 15 164	1847 9 153	26.0
4.5	1751 34 249	1783 29 217	1810 24 190	1831 18 169	1846 12 154	1856 + 7 144	1860 + 1 140	25.5
5.0	1798 27 202	1823 22 177	1842 16 158	1856 11 144	1863 + 4 137	1864 - 1 136	1860 - 7 140	25.0
5.5	1834 20 166	1852 14 148	1863 + 8 137	1869 + 2 131	1868 - 3 132	1862 9 138	1849 15 151	24.5
6.0	1860 12 140	1869 + 6 131	1873 0 127	1870 - 5 130	1862 11 138	1847 17 153	1827 23 173	24.0
6.5	1873 + 5 127	1875 - 1 125	1871 - 7 129	1860 13 140	1844 19 156	1822 25 178	1795 30 205	23.5
7.0	1876 - 4 124	1870 9 130	1858 15 142	1840 21 160	1816 26 184	1787 32 213	1752 37 248	23.0
7.5	1868 11 132	1854 17 146	1834 22 166	1809 28 191	1778 34 222	1742 39 258	1700 44 300	22.5
8.0	1848 18 152	1827 24 173	1800 30 200	1767 35 233	1730 40 270	1687 45 313	1639 50 361	22.0
8.5	1818 26 182	1789 31 211	1755 37 245	1716 42 284	1672 46 328	1623 51 377	1570 55 430	21.5
9.0	1777 33 223	1742 38 258	1701 43 299	1656 48 344	1606 52 394	1552 56 448	1494 60 506	21.0
9.5	1726 40 274	1684 44 316	1638 49 362	1587 53 413	1532 57 468	1473 60 527	1411 63 589	20.5
10.0	1666 46 334	1618 50 382	1566 54 434	1510 58 490	1450 61 550	1388 64 612	1322 66 678	20.0
10.5	1596 51 404	1543 55 457	1486 59 514	1426 62 574	1363 64 637	1297 67 703	1229 68 771	19.5
11.0	1519 56 481	1461 60 539	1400 62 600	1336 65 664	1270 67 730	1202 69 798	1132 70 868	19.0
11.5	1434 60 566	1372 63 628	1307 65 693	1241 67 759	1173 69 827	1103 70 897	1033 70 967	18.5
12.0	1342 64 658	1277 66 723	1210 68 790	1142 69 858	1073 69 927	1003 70 997	933 70 1067	18.0
12.5	1245 66 755	1178 68 822	1110 69 890	1041 69 959	971 69 1029	902 69 1058	834 68 1166	17.5
13.0	1144 68 856	1076 69 924	1007 69 993	938 69 1062	870 68 1130	802 67 1198	736 65 1264	17.0
13.5	1041 68 959	972 68 1028	904 68 1096	836 67 1164	770 66 1230	705 64 1295	642 62 1358	16.5
14.0	937 68 1063	860 67 1131	782 66 1198	707 65 1263	633 63 1327	562 60 1388	495 57 1447	16.0
14.5	834 67 1166	768 65 1232	703 64 1297	630 61 1359	559 57 1420	494 54 1485	436 50 1530	15.5
15.0	733 64 1267	669 62 1331	608 60 1392	550 57 1450	494 54 1506	442 50 1558	394 46 1606	15.0
15.5	636 61 1364	576 58 1424	519 55 1481	465 52 1535	415 48 1585	369 44 1631	328 39 1672	14.5
16.0	544 57 1456	489 54 1511	437 50 1563	389 46 1611	345 42 1655	306 37 1694	271 32 1729	14.0
16.5	459 52 1541	409 48 1591	363 44 1637	321 39 1679	284 35 1716	252 30 1748	225 24 1775	13.5
17.0	382 46 1618	338 42 1662	298 37 1702	264 32 1736	234 27 1766	209 22 1791	190 16 1810	13.0
17.5	314 40 1686	276 35 1724	244 30 1756	216 25 1784	194 19 1806	178 14 1822	167 - 8 1833	12.5
18.0	256 33 1744	226 28 1774	201 22 1799	181 17 1819	167 11 1833	158 - 6 1842	156 0 1844	12.0
18.5	209 26 1791	186 20 1814	169 15 1831	157 9 1843	151 - 3 1849	151 + 3 1849	157 + 8 1843	11.5
19.0	173 18 1827	158 12 1842	148 - 7 1852	145 - 1 1855	147 + 5 1853	155 11 1845	169 17 1831	11.0
19.5	148 10 1852	141 - 4 1859	139 + 2 1861	144 + 7 1856	154 13 1846	170 19 1830	192 25 1808	10.5
20.0	135 - 2 1865	136 + 4 1864	142 10 1858	154 15 1846	173 21 1827	197 27 1803	226 32 1774	10.0
20.5	133 + 6 1867	141 12 1859	156 17 1844	176 23 1824	202 29 1798	233 34 1767	270 39 1730	9.5
21.0	142 13 1858	158 19 1842	181 25 1819	208 30 1792	242 36 1758	280 41 1720	323 46 1677	9.0
21.5	162 21 1838	186 27 1814	216 32 1784	251 37 1749	291 42 1709	336 47 1664	385 51 1615	8.5
22.0	193 28 1807	225 34 1775	261 39 1739	303 44 1697	349 49 1651	400 53 1600	454 57 1546	8.0
22.5	234 35 1766	273 41 1727	316 45 1684	363 50 1637	415 54 1585	471 58 1529	531 61 1469	7.5
23.0	285 42 1715	330 47 1670	379 51 1621	432 55 1568	489 59 1511	550 62 1450	613 65 1387	7.0
23.5	346 48 1654	396 52 1604	450 56 1550	508 60 1492	570 63 1430	634 66 1366	701 68 1299	6.5
24.0	414 53 1586	469 57 1531	528 61 1472	590 64 1410	656 66 1344	723 68 1277	792 70 1208	6.0
24.5	490 58 1510	550 61 1450	613 64 1387	679 67 1321	747 69 1253	816 70 1184	887 71 1113	5.5
25.0	574 62 1426	637 65 1363	703 67 1297	772 69 1228	841 70 1159	912 71 1088	983 71 1017	5.0
25.5	663 65 1337	730 67 1270	798 69 1202	868 70 1132	938 71 1062	1010 71 990	1080 70 920	4.5
26.0	758 68 1242	826 69 1174	896 70 1104	966 70 1034	1037 70 963	1107 70 893	1177 69 823	4.0
26.5	856 69 1144	926 70 1074	996 70 1004	1066 70 934	1136 69 864	1204 68 796	1271 66 729	3.5
27.0	957 69 1043	1027 70 973	1096 69 904	1165 68 835	1233 67 767	1299 65 701	1363 63 637	3.0
27.5	1059 69 941	1128 68 872	1196 67 804	1262 66 738	1327 64 673	1390 61 610	1450 58 550	2.5
28.0	1161 68 839	1228 66 772	1293 64 707	1356 62 644	1417 60 583	1476 56 524	1530 53 470	2.0
28.5	1260 65 740	1324 63 676	1386 61 614	1446 58 554	1502 54 498	1555 51 445	1604 47 396	1.5
29.0	1356 62 644	1417 59 583	1474 56 526	1529 52 471	1579 49 421	1626 45 374	1668 40 332	1.0
29.5	1448 57 552	1503 54 497	1556 50 444	1604 46 396	1648 42 352	1688 38 312	1724 33 276	+0.5
30.0	1532 52 468	1582 48 418	1629 44 371	1671 40 329	1708 35 292	1741 30 259	1768 25 232	0.0
30.5	1609+46 391	1653+42 347	1693+37 307	1728+32 272	1758+27 242	1782+22 218	1802+17 198	-0.5
Arg.	34 v 72	33 v 71	32 v 70	31 v 69	30 v 68	29 v 67	28 v 66	Arg.

TABLE 15 (cont.).

Vert. Arg. D.

Hor. Arg. 19 + a (p. 46).

Arg.	11 v 49	12 v 50	13 v 51	14 v 52	15 v 53	16 v 54	17 v 55	Arg.
d								d
-0.5	1331+63 669	1393+60 607	1451+57 549	1507+54 493	1559+50 441	1608+46 392	1652+42 348	30.5
0.0	1424 58 576	1481 55 519	1535 52 465	1585 48 415	1631 44 369	1673 40 327	1710 35 290	30.0
+0.5	1511 54 489	1562 50 438	1610 46 390	1654 42 346	1694 37 306	1728 32 272	1758 27 242	29.5
1.0	1590 48 410	1636 44 364	1678 39 322	1714 34 286	1746 29 254	1773 24 227	1794 19 206	29.0
1.5	1660 41 340	1700 37 300	1734 32 266	1763 27 237	1788 22 212	1806 16 194	1820 10 180	28.5
2.0	1721 34 279	1753 29 247	1780 24 220	1802 19 198	1818 13 182	1828 + 8 172	1833 + 2 167	28.0
2.5	1771 27 229	1796 22 204	1815 16 185	1828 11 172	1836 + 5 164	1838 - 1 162	1834 - 7 166	27.5
3.0	1810 19 190	1827 14 173	1837 + 8 163	1842 + 2 158	1842 - 4 158	1836 9 164	1823 15 177	27.0
3.5	1838 11 162	1846 + 5 154	1848 0 152	1845 - 6 155	1836 12 164	1822 18 178	1801 23 199	26.5
4.0	1853 + 3 147	1853 - 3 147	1848 - 9 152	1836 14 164	1819 20 181	1796 26 204	1768 31 232	26.0
4.5	1857 - 5 143	1849 11 151	1836 17 164	1816 22 184	1791 28 209	1760 33 240	1725 38 275	25.5
5.0	1850 13 150	1834 19 166	1812 24 188	1785 30 215	1752 35 248	1714 40 286	1672 45 328	25.0
5.5	1831 21 169	1808 27 192	1778 32 222	1744 37 259	1704 42 296	1660 47 340	1610 51 390	24.5
6.0	1802 28 198	1770 34 230	1734 39 266	1693 44 307	1646 48 354	1596 53 404	1541 56 459	24.0
6.5	1762 36 238	1724 41 276	1681 45 319	1633 50 367	1581 54 419	1525 58 475	1465 61 535	23.5
7.0	1712 42 288	1668 47 332	1619 51 381	1565 55 435	1508 59 492	1447 62 553	1383 65 617	23.

TABLE 15 (concl.). Vert. Arg. D. Hor. Arg. 19 + a. Addition to Arg. 19.

Arg.	18 v	56	19 v	57	Arg.	Day of year	a
d					d		
-0.5	1692 + 37	308	1727 + 33	273	30.5		
0.0	1742 30	258	1770 25	230	30.0	0	.00
+0.5	1782 22	218	1801 16	199	29.5	10	+ .02
1.0	1811 13	189	1821 + 8	179	29.0	20	.03
1.5	1827 + 5	173	1829 - 1	171	28.5	30	.05
2.0	1832 - 4	168	1825 9	175	28.0	40	.06
2.5	1825 12	175	1810 18	190	27.5	50	.07
3.0	1806 21	194	1782 26	218	27.0	60	.08
3.5	1775 28	225	1744 34	256	26.5	70	.08
4.0	1735 36	265	1696 41	304	26.0	80	.09
4.5	1684 43	316	1639 48	361	25.5	90	.09
5.0	1625 49	375	1573 54	427	25.0	100	.09
5.5	1557 55	443	1500 59	500	24.5	110	.09
6.0	1483 60	517	1421 63	579	24.0	120	.08
6.5	1402 64	598	1337 67	663	23.5	130	.07
7.0	1317 68	683	1248 69	752	23.0	140	.06
7.5	1228 70	772	1157 71	843	22.5	150	.05
8.0	1136 72	864	1064 72	936	22.0	160	.03
8.5	1042 72	958	970 72	1030	21.5	170	+ .02
9.0	948 72	1052	876 71	1124	21.0	180	.00
9.5	853 71	1147	783 70	1217	20.5	190	-.01
10.0	761 69	1239	693 67	1307	20.0	200	.03
10.5	671 66	1329	607 63	1393	19.5	210	.04
11.0	585 62	1415	525 59	1475	19.0	220	.05
11.5	505 57	1495	450 54	1550	18.5	230	.07
12.0	431 51	1569	381 47	1619	18.0	240	.08
12.5	364 45	1636	321 40	1679	17.5	250	.08
13.0	306 38	1694	270 33	1730	17.0	260	.09
13.5	258 31	1742	230 25	1770	16.5	270	.09
14.0	220 23	1780	201 17	1799	16.0	280	.09
14.5	194 14	1806	183 - 9	1817	15.5	290	.09
15.0	180 - 6	1820	177 0	1823	15.0	300	.08
15.5	177 + 3	1823	183 + 9	1817	14.5	310	.07
16.0	186 12	1814	201 17	1799	14.0	320	.06
16.5	207 20	1793	230 25	1770	13.5	330	.05
17.0	240 28	1760	270 33	1730	13.0	340	.04
17.5	283 36	1717	321 40	1679	12.5	350	.02
18.0	336 43	1664	381 47	1619	12.0	360	-.01
18.5	398 50	1602	450 54	1550	11.5	370	+ .01
19.0	468 55	1532	525 59	1475	11.0		
19.5	545 60	1455	607 63	1393	10.5		
20.0	627 64	1373	693 67	1307	10.0		
20.5	714 68	1286	783 70	1217	9.5		
21.0	805 70	1195	876 71	1124	9.0		
21.5	897 72	1103	970 72	1030	8.5		
22.0	991 72	1009	1064 72	936	8.0		
22.5	1085 72	915	1157 71	843	7.5		
23.0	1178 71	822	1248 69	752	7.0		
23.5	1269 69	731	1337 67	663	6.5		
24.0	1357 66	643	1421 63	579	6.0		
24.5	1440 62	560	1500 59	500	5.5		
25.0	1518 57	482	1573 54	427	5.0		
25.5	1589 52	411	1639 48	361	4.5		
26.0	1653 46	347	1696 41	304	4.0		
26.5	1708 39	292	1744 34	256	3.5		
27.0	1754 31	246	1782 26	218	3.0		
27.5	1789 23	211	1810 18	190	2.5		
28.0	1813 15	187	1825 9	175	2.0		
28.5	1826 + 6	174	1829 + 1	171	1.5		
29.0	1826 - 2	174	1821 - 8	179	1.0		
29.5	1815 11	185	1801 16	199	+0.5		
30.0	1792 19	208	1770 25	230	0.0		
30.5	1757 - 28	243	1727 - 33	273	-0.5		
Arg.	20 v	58	19 v	57	Arg.		

TABLE 16.

Vert. Arg. D.

Hor. Arg. 21.

TABLE 17. Arg. 51.

TABLE 18. Arg. 52.

Arg.	0 v	4 v	32	8 v	36	12 v	40	Arg.	Arg.	0	1	2	3	4	5	Succ.	Arg.	0	1	2
d								d									d			
-0.5	26 - 2	19 - 2	21	13 - 1	27	8 - 1	32	30.5									0.0	7	7	7
0.0	23 2	16 2	24	10 1	30	6 - 1	34	30.0	0.0	[15]	15	15	15	15	15	12.5	0.5	7	7	7
+0.5	20 2	13 1	27	8 1	32	5 0	35	29.5	0.5	15	15	15	15	15	15	12.0	1.0	7	7	7
1.0	16 2	10 1	30	6 - 1	34	5 0	35	29.0	1.0	14	14	14	14	14	14	11.5	1.5	7	7	6
1.5	13 2	8 1	32	4 0	36	4 0	36	28.5	1.5	13	13	13	13	13	13	11.0				
2.0	11 1	6 1	34	3 0	37	4 + 1	36	28.0	2.0	12	12	12	12	12	12	10.5	2.0	6	6	6
2.5	8 1	4 - 1	36	3 0	37	5 1	35	27.5	2.5	10	10	10	10	10	10	10.0	2.5	6	6	6
3.0	7 1	3 0	37	3 0	37	6 1	34	27.0	3.0	8	8	8	8	8	8	9.5	3.0	6	6	6
3.5	6 1	3 0	37	3 + 1	37	7 1	33	26.5	3.5	6	6	6	6	6	6	9.0	4.0	5	5	5
4.0	5 1	3 0	37	4 1	36	9 1	31	26.0	4.0	5	4	4	4	4	4	8.5	4.5	5	4	4
4.5	6 1	4 0	36	6 1	34	11 1	29	25.5	4.5	3	3	3	3	3	3	8.0	5.0	4	4	4
5.0	7 - 1	6 0	34	8 1	32	12 1	28	25.0	5.0	2	2	1	1	1	1	7.5	5.5	4	3	3
5.5	8 0	8 0	32	10 1	30	14 1	26	24.5	5.5	1	1	1	1	1	0	7.0	6.0	3	3	3
6.0	10 0	10 0	30	12 1	28	16 1	24	24.0	6.0	0	0	0	0	0	0	6.5	6.5	3	2	2
6.5	13 0	13 0	27	15 + 1	25	18 + 1	22	23.5	6.5	0	0	0	0	0	0	6.0	7.0	2	2	2
7.0	16 0	16 0	24	17 0	23	19 0	21	23.0	7.0	0	0	0	0	0	0	5.5	7.5	2	2	1
7.5	19 0	19 0	21	20 0	20	20 0	20	22.5	7.5	1	1	1	1	1	1	5.0	8.0	1	1	1
8.0	22 0	22 0	18	22 0	18	21 0	19	22.0	8.0	2	2	2	2	2	3	4.5	8.5	1	1	1
8.5	26 0	25 0	15	23 0	17	21 - 1	19	21.5	8.5	4	4	4	4	4	4	4.0	9.0	0	0	0
9.0	28 0	27 0	13	25 - 1	15	21 1	19	21.0	9.0	5	5	6	6	6	6	3.5	9.5	0	0	0
9.5	31 0	29 - 1	11	25 1	15	21 1	19	20.5	9.5	7	7	7	8	8	8	3.0	10.0	0	0	0
10.0	33 0	30 1	10	26 1	14	20 1	20	20.0	10.0	9	9	9	9	10	10	2.5	10.5	0	0	0
10.5	34 0	31 1	9	26 2	14	19 2	21	19.5	10.5	11	11	11	11	11	11	2.0	11.0	0	0	0
11.0	35 - 1	31 1	9	25 2	15	18 2	22	19.0	11.0	12	12	12	13	13	13	1.5	11.5	0	0	0
11.5	35 1	30 1	10	24 2	16	16 2	24	18.5	11.5	14	14	14	14	14	14	1.0	12.0	0	0	0
12.0	35 1	29 2	11	22 2	18	14 2	26	18.0	12.0	14	15	15	15	15	15	0.5	12.5	0	0	0
12.5	34 1	28 2	12	20 2	20	12 2	28	17.5	12.5	15	15	15	15	15	15	0.0	13.0	0	1	1
13.0	32 1	25 2	15	18 2	22	11 2	29	17.0									13.5	1	1	1
13.5	29 1	22 2	18	15 2	25	9 1	31	16.5	Succ.	9	10	11	12	13	14		14.0	1	1	1
14.0	26 2	20 2	20	13 2	27	8 1	32	16.0									14.5	1	2	2
14.5	23 2	16 2	24	10 1	30	6 - 1	34	15.5		10	9	8	7	6	5	Arg.	15.0	2	2	2
15.0	20 2	14 1	26	8 1	32	5 0	35	15.0									15.5	2	2	2
15.5	17 2	11 1	29	6 - 1	34	5 0	35	14.5	Arg.	11	12	13	14				16.0	3	3	3
16.0	14 2	8 1	32	5 0	35	5 0	35	14.0									16.5	3	3	4

TABLE 19. Cols. 0-32.

Arg. 53.

Table with columns Arg., 0, 1, 2, 3, 4, 5, 6, 7, 8, v, 9, 10, 11, 12, 13, 14, 15, 16, 16, Succ. and rows from 0.0 to 35.0.

TABLE 19 (concl.). Cols. 33-38. Arg. 53.

TABLE 20. Cols. 0-15.

Arg. 54.

Table with columns Arg., 33, 34, 35, v, Succ. and rows from 0.0 to 35.0, and a second table with columns Arg., 0, 1, 2, 3, v, 4, 5, 6, 7, Succ. and rows from 0.0 to 35.0.

TABLE 21 (cont.). Cols. 12-24, 49-61.

Arg. 55.

TABLE 21 (cont.). Cols. 25-48.

Arg. 55.

Arg.	12	13	14	15	16	17	18	v	19	20	21	22	23	24	Succ.
d	118	117	116	115	114	113	112		111	110	109	108	107	106	d
0.0	105605	105604	105604	105604	105603	105603	105602	-1	105602	105601	105600	105600	105599	105598	32.0
0.5	105310	105306	105302	105297	105293	105289	105284	4	105280	105276	105271	105267	105262	105258	31.5
1.0	104520	104512	104504	104496	104488	104480	104472	8	104464	104455	104447	104439	104431	104422	31.0
1.5	103243	103231	103219	103208	103196	103184	103172	12	103160	103148	103136	103124	103112	103100	30.5
2.0	101490	101474	101459	101444	101428	101413	101397	15	101382	101366	101351	101335	101320	101304	30.0
2.5	99278	99259	99240	99222	99203	99184	99165	19	99146	99127	99108	99089	99070	99051	29.5
3.0	96628	96606	96584	96562	96540	96518	96495	22	96473	96451	96429	96407	96384	96362	29.0
3.5	93565	93540	93515	93490	93465	93440	93414	25	93389	93364	93338	93313	93288	93263	28.5
4.0	90119	90091	90063	90035	90007	89979	89951	28	89923	89895	89867	89838	89810	89782	28.0
4.5	86321	86290	86260	86229	86198	86168	86137	31	86107	86076	86046	86015	85984	85954	27.5
5.0	82207	82175	82142	82109	82076	82043	82010	33	81978	81945	81912	81879	81846	81813	27.0
5.5	77818	77783	77748	77714	77679	77644	77609	35	77574	77540	77505	77470	77435	77400	26.5
6.0	73193	73157	73120	73084	73048	73011	72975	36	72938	72902	72866	72829	72793	72756	26.0
6.5	68378	68340	68302	68264	68227	68189	68151	38	68114	68076	68038	68000	67963	67925	25.5
7.0	63416	63378	63339	63300	63262	63223	63185	39	63146	63107	63069	63030	62991	62953	25.0
7.5	58357	58317	58278	58239	58200	58161	58122	39	58082	58043	58004	57965	57926	57886	24.5
8.0	53246	53207	53167	53128	53089	53049	53010	39	52970	52931	52892	52852	52813	52774	24.0
8.5	48133	48094	48055	48016	47976	47937	47898	39	47859	47820	47781	47741	47702	47663	23.5
9.0	43067	43028	42989	42950	42912	42873	42835	39	42796	42757	42719	42680	42642	42603	23.0
9.5	38094	38056	38018	37981	37943	37905	37868	38	37830	37792	37754	37717	37679	37641	22.5
10.0	33262	33226	33189	33153	33116	33080	33043	36	33007	32971	32934	32898	32861	32825	22.0
10.5	28618	28583	28548	28513	28478	28443	28408	35	28374	28339	28304	28269	28234	28200	21.5
11.0	24203	24170	24138	24105	24072	24039	24006	33	23973	23940	23907	23875	23842	23809	21.0
11.5	20062	20031	20000	19970	19939	19908	19878	31	19847	19817	19786	19756	19725	19694	20.5
12.0	16232	16204	16176	16148	16119	16091	16063	28	16035	16007	15979	15951	15923	15895	20.0
12.5	12750	12725	12699	12674	12649	12623	12598	25	12573	12548	12523	12498	12472	12447	19.5
13.0	9649	9627	9605	9582	9560	9538	9516	22	9494	9471	9449	9427	9405	9383	19.0
13.5	6938	6939	6920	6901	6882	6864	6845	19	6826	6807	6788	6769	6750	6732	18.5
14.0	4703	4688	4672	4657	4641	4626	4610	15	4595	4579	4564	4549	4533	4518	18.0
14.5	2906	2894	2882	2870	2858	2846	2834	12	2822	2810	2798	2787	2775	2763	17.5
15.0	1582	1574	1565	1557	1549	1540	1532	8	1524	1516	1508	1499	1491	1484	17.0
15.5	744	740	736	731	727	722	718	4	713	709	705	700	696	692	16.5
16.0	402	401	401	400	399	399	398	-1	398	397	397	396	396	395	16.0
16.5	557	560	563	566	570	573	576	+3	580	583	586	590	593	596	15.5
17.0	1209	1216	1222	1229	1236	1244	1251	7	1258	1265	1272	1279	1286	1294	15.0
17.5	2350	2361	2372	2382	2393	2404	2414	11	2425	2436	2447	2458	2469	2480	14.5
18.0	3971	3985	4000	4014	4028	4043	4057	14	4072	4086	4101	4115	4130	4144	14.0
18.5	6056	6074	6092	6110	6127	6145	6163	18	6181	6199	6217	6235	6253	6271	13.5
19.0	8585	8606	8628	8649	8670	8691	8712	21	8734	8755	8776	8798	8820	8842	13.0
19.5	11535	11559	11583	11608	11632	11656	11681	24	11705	11729	11754	11778	11803	11827	12.5
20.0	14877	14904	14931	14958	14986	15013	15040	27	15067	15095	15122	15149	15177	15204	12.0
20.5	18580	18609	18639	18669	18699	18729	18759	30	18788	18818	18848	18878	18908	18938	11.5
21.0	22608	22640	22672	22705	22737	22770	22803	32	22834	22866	22898	22930	22963	22995	11.0
21.5	26924	26958	26993	27027	27061	27096	27130	34	27164	27198	27233	27267	27301	27336	10.5
22.0	31487	31523	31559	31595	31631	31667	31703	36	31739	31775	31811	31847	31883	31919	10.0
22.5	36254	36291	36328	36366	36403	36440	36478	37	36515	36553	36590	36628	36665	36702	9.5
23.0	41179	41217	41256	41294	41332	41371	41409	38	41448	41486	41524	41563	41601	41640	9.0
23.5	46216	46255	46294	46333	46372	46411	46450	39	46489	46528	46567	46606	46645	46684	8.5
24.0	51317	51356	51395	51435	51474	51514	51553	39	51592	51632	51671	51710	51750	51789	8.0
24.5	56434	56473	56512	56552	56591	56630	56670	39	56709	56748	56787	56827	56866	56905	7.5
25.0	61518	61557	61596	61635	61674	61712	61751	39	61790	61829	61868	61907	61945	61984	7.0
25.5	66522	66560	66598	66636	66674	66712	66750	38	66788	66826	66864	66902	66940	66978	6.5
26.0	71398	71435	71472	71509	71546	71582	71619	37	71656	71693	71730	71766	71803	71840	6.0
26.5	76100	76135	76171	76206	76241	76277	76312	35	76347	76382	76418	76453	76488	76524	5.5
27.0	80583	80617	80650	80684	80717	80750	80784	33	80817	80851	80884	80918	80951	80984	5.0
27.5	84805	84837	84868	84899	84931	84962	84993	31	85024	85056	85087	85118	85149	85180	4.5
28.0	88726	88755	88784	88813	88842	88871	88899	29	88928	88957	88986	89014	89043	89072	4.0
28.5	92310	92339	92368	92398	92427	92456	92486	26	92515	92544	92573	92602	92631	92660	3.5
29.0	95520	95544	95567	95590	95613	95636	95659	23	95682	95705	95728	95751	95774	95797	3.0
29.5	98329	98349	98369	98389	98409	98429	98449	20	98468	98488	98508	98528	98548	98567	2.5
30.0	100709	100725	100742	100758	100775	100791	100808	16	100824	100841	100857	100873	100889	100906	2.0
30.5	102637	102650	102663	102676	102689	102702	102715	13	102728	102740	102753	102766	102779	102791	1.5
31.0	104095	104105	104114	104123	104132	104142	104151	9	104160	104169	104178	104188	104197	104206	1.0
31.5	105070	105076	105081	105087	105092	105098	105103	5	105109	105114	105119	105125	105130	105135	0.5
32.0	105552	105554	105556	105557	105559	105561	105562	+2	105564	105566	105567	105568	105570	105572	0.0
Succ.	69	70	71	72	73	74	75		76	77	78	79	80	81	
	61	60	59	58	57	56	55	v	54	53	52	51	50	49	Arg.

Arg.	25	26	27	28	29	30	v	31	32	33	34	35	36	Succ.
d	105	104	103	102	101	100		99	98	97	96	95	94	d
0.0	105598	105597	105596	105595	105594	105594	-1	105593	105592	105591	105590	105589	105588	32.0
0.5	105253	105249	105244	105239	105235	105230	5	105225	105220	105216	105211	105206	105201	31.5
1.0	104414	104406	104397	104389	104380	104372	9	104364	104355	104346	104338	104329	104321	31.0
1.5	103088	103076	103064	103052	103040	103028	12	103016	103003	102991	102979	102967	102954	30.5
2.0	101289	101273	101257	101242	101226	101210	16	101194	101179	101163	101147	101131	101115	30.0
2.5	99032	99013	98994	98975	98956	98936	19	98917	98898	98879	98860	98840	98821	29.5
3.0	96340	96318	96295	96273	9625									

TABLE 21 (cont.). Cols. 74-87, 116-129.

Arg. 55.

Table with columns for Arg. (74-87, 116-129) and rows for d (0.0-31.5) and Succ. (1-129). Values include lunar distance and other astronomical data.

TABLE 21 (concl.). Cols. 88-115.

Arg. 55.

Table with columns for Arg. (88-115) and rows for d (0.0-31.5) and Succ. (115-102). Values include lunar distance and other astronomical data.

TABLE 21 (cont.). Cols. 74-87, 116-129.

Arg. 55.

Table with columns for Arg. (74-87, 116-129) and rows for d (0.0-31.5). Includes sub-headers for 56-53, 49-43, and 1-14.

TABLE 21 (concl.). Cols. 88-115.

Arg. 55.

Table with columns for Arg. (88-115) and rows for d (0.0-31.5). Includes sub-headers for 42-36, 35-31, 29-28, and 115-102.

TABLE 22.

Table with columns Arg., 0, 1, 2, 3, 4, 5, v, 6, 7, 8, 9, 10, Succ. and rows for d values from 0.0 to 10.0.

Table with columns Arg., 22, 23, 24, 25, 26, 27, 28, v, 29, 30, 31, 32, 33, 34, 35, Succ. and rows for d values from 0.0 to 9.5.

Table with columns Arg., 36, 37, 38, 39, 40, 41, 42, 43, v, 44, 45, 46, 47, 48, 49, 50, Succ. and rows for d values from 0.0 to 9.5.

TABLE 23. Cols. 0-30, 87-III.

Table with columns Arg., 0, 1, 2, v, Succ., 6, 7, 8, 9, 10, v, 11, 12, 13, 14, 15, Succ. and rows for d values from 0.0 to 16.0.

Table with columns Arg., 16, 17, 18, 19, 20, 21, 22, 23, v, 24, 25, 26, 27, 28, 29, 30, Succ. and rows for d values from 0.0 to 15.5.

TABLE 23 (concl.). Cols. 31-86.

Arg. 57.

Arg.	31	32	33	34	35	36	37	v	38	39	40	41	42	43	44	Succ.
	81	80	79	78	77	76	75		74	73	72	71	70	69	68	
d								o	1199	1199	1198	1198	1198	1198	1198	15.5
0.0	1199	1199	1199	1199	1199	1199	1199	o	1199	1199	1198	1198	1198	1198	1198	15.0
0.5	1181	1181	1181	1180	1180	1180	1180	o	1179	1179	1179	1179	1178	1178	1178	14.5
1.0	1141	1141	1140	1140	1139	1139	1138	o	1138	1138	1137	1137	1136	1136	1135	14.0
1.5	1080	1080	1079	1078	1078	1077	1076	-I	1076	1075	1075	1074	1073	1073	1072	13.5
2.0	1001	1000	1000	999	998	997	996	I	996	995	994	993	992	992	991	13.0
2.5	906	906	905	904	903	902	901	I	900	899	898	897	896	896	895	12.5
3.0	800	799	798	797	796	795	794	I	793	792	791	790	789	788	787	12.0
3.5	686	685	684	683	682	681	680	I	679	678	677	676	675	674	673	11.5
4.0	569	568	567	566	564	563	562	I	561	560	559	558	557	556	555	11.0
4.5	453	452	451	450	449	448	447	I	446	444	443	442	441	440	439	10.5
5.0	342	341	340	339	338	337	336	I	336	335	334	333	332	331	330	10.0
5.5	242	241	240	239	238	237	236	I	236	235	234	233	232	232	231	9.5
6.0	155	154	153	153	152	151	150	I	150	149	148	148	147	146	146	9.0
6.5	85	84	84	83	83	82	82	-I	81	81	80	80	79	78	78	8.5
7.0	35	34	34	34	34	33	33	o	32	32	32	31	31	31	30	8.0
7.5	6	6	6	6	6	6	6	o	5	5	5	5	5	5	4	7.5
8.0	1	1	1	1	1	1	1	o	1	1	1	1	1	2	2	7.0
8.5	18	18	19	19	19	19	20	o	20	20	20	21	21	21	22	6.5
9.0	58	58	59	59	60	60	60	o	61	61	62	62	63	63	64	6.0
9.5	118	119	119	120	121	121	122	+I	122	123	124	124	125	126	126	5.5
10.0	197	198	198	199	200	201	202	I	202	203	204	205	206	206	207	5.0
10.5	291	292	293	294	295	296	297	I	298	298	299	300	301	302	303	4.5
11.0	397	398	399	400	401	402	403	I	404	405	406	407	408	409	410	4.0
11.5	511	512	513	514	515	516	517	I	518	520	521	522	523	524	525	3.5
12.0	629	630	631	632	633	634	635	I	636	637	638	639	640	641	642	3.0
12.5	745	746	747	748	749	750	751	I	752	753	754	755	756	757	758	2.5
13.0	856	856	857	858	859	860	861	I	862	863	864	865	866	867	868	2.0
13.5	956	957	958	959	960	960	961	I	962	963	964	965	966	966	967	1.5
14.0	1044	1044	1045	1046	1046	1047	1048	I	1048	1049	1050	1051	1051	1052	1053	1.0
14.5	1114	1114	1115	1115	1116	1116	1117	+I	1118	1118	1119	1119	1120	1120	1121	0.5
15.0	1164	1165	1165	1165	1166	1166	1166	o	1167	1167	1168	1168	1168	1169	1169	0.0
15.5	1193	1193	1194	1194	1194	1194	1194	o	1194	1194	1194	1195	1195	1195	1195	
Succ.	26	27	28	29	30	31	32		33	34	35	36	37	38	39	
	86	85	84	83	82	81	80	v	79	78	77	76	75	74	73	Arg.

TABLE 24. 0.0-449.5, 1741.0-2190.5.

Arg. 58.

Arg.	0	30	60	90	120	150	180	210	240	270	300	330	360	390	420	Arg.
d																d
0.0	[4160]	4152	4129	4092	4039	3972	3891	3797	3691	3572	3443	3304	3156	3000	2837	30.5
0.5	4160	4152	4129	4091	4038	3971	3890	3796	3689	3570	3441	3302	3153	2997	2835	30.0
1.0	4160	4152	4128	4090	4037	3970	3888	3794	3687	3568	3439	3299	3151	2995	2832	29.5
1.5	4160	4152	4128	4089	4036	3968	3887	3792	3685	3566	3436	3297	3148	2992	2829	29.0
2.0	4160	4151	4127	4088	4035	3967	3886	3791	3683	3564	3434	3294	3146	2989	2826	28.5
2.5	4160	4151	4127	4088	4034	3966	3884	3789	3681	3562	3432	3292	3143	2987	2824	28.0
3.0	4160	4151	4126	4087	4033	3965	3883	3787	3680	3560	3430	3290	3141	2984	2821	27.5
3.5	4160	4150	4126	4086	4032	3964	3881	3786	3678	3558	3427	3287	3138	2981	2818	27.0
4.0	4160	4150	4125	4085	4031	3962	3880	3784	3676	3556	3425	3285	3136	2979	2815	26.5
4.5	4160	4150	4125	4085	4030	3961	3878	3782	3674	3554	3423	3282	3133	2976	2812	26.0
5.0	4160	4150	4124	4084	4029	3960	3877	3780	3672	3552	3421	3280	3130	2973	2810	25.5
5.5	4160	4149	4124	4083	4028	3958	3875	3779	3670	3550	3418	3277	3128	2970	2807	25.0
6.0	4160	4149	4123	4082	4027	3957	3874	3777	3668	3547	3416	3275	3125	2968	2804	24.5
6.5	4159	4149	4122	4081	4026	3956	3872	3775	3666	3545	3414	3272	3123	2965	2801	24.0
7.0	4159	4148	4122	4081	4025	3955	3871	3774	3664	3543	3412	3270	3120	2962	2799	23.5
7.5	4159	4148	4121	4080	4024	3953	3869	3772	3662	3541	3409	3268	3118	2960	2796	23.0
8.0	4159	4148	4121	4079	4023	3952	3868	3770	3660	3539	3407	3265	3115	2957	2793	22.5
8.5	4159	4148	4120	4078	4022	3951	3866	3768	3658	3537	3405	3263	3112	2954	2790	22.0
9.0	4159	4147	4120	4077	4021	3949	3865	3767	3656	3535	3402	3260	3110	2952	2788	21.5
9.5	4159	4147	4119	4076	4020	3948	3863	3765	3655	3533	3400	3258	3107	2949	2785	21.0
10.0	4159	4146	4118	4076	4018	3947	3862	3763	3653	3530	3398	3256	3105	2946	2782	20.5
10.5	4159	4146	4118	4075	4017	3946	3860	3761	3651	3528	3396	3253	3102	2944	2779	20.0
11.0	4159	4146	4117	4074	4016	3944	3858	3759	3649	3526	3393	3251	3100	2941	2776	19.5
11.5	4159	4145	4117	4073	4015	3943	3857	3758	3647	3524	3391	3248	3097	2938	2774	19.0
12.0	4159	4145	4116	4072	4014	3942	3855	3756	3645	3522	3389	3246	3094	2936	2771	18.5
12.5	4158	4145	4116	4071	4013	3940	3854	3754	3643	3520	3386	3243	3092	2933	2768	18.0
13.0	4158	4144	4115	4070	4012	3939	3852	3752	3641	3518	3384	3241	3089	2930	2765	17.5
13.5	4158	4144	4114	4070	4011	3938	3851	3751	3639	3516	3382	3238	3087	2928	2762	17.0
14.0	4158	4144	4114	4069	4010	3936	3849	3749	3637	3513	3379	3236	3084	2925	2760	16.5
14.5	4158	4143	4113	4068	4008	3935	3848	3747	3635	3511	3377	3233	3081	2922	2757	16.0
15.0	4158	4143	4112	4067	4007	3934	3846	3745	3633	3509	3375	3231	3079	2920	2754	15.5
15.5	4158	4142	4112	4066	4006	3932	3844	3744	3631	3507	3372	3228	3076	2917	2751	15.0
16.0	4158	4142	4111	4065	4005	3931	3843	3742	3629	3505	3370	3226	3074	2914	2748	14.5
16.5	4158	4142	4110	4064	4004	3929	3841	3740	3627	3503	3368	3223	307			

TABLE 24 (cont.). 450.0-899.5, 1291.0-1740.5.

Arg. 58.

Table with 17 columns (Arg. 450 to 870) and 29 rows of numerical data. Includes a final row with values 1710, 1680, 1650, 1620, 1590, 1560, 1530, 1500, 1470, 1440, 1410, 1380, 1350, 1320, 1290, and Arg.

TABLE 24 (concl.). 900.0-1290.5. Arg. 58.

TABLE 25. Cols. 0-1, 0.0-62.5; 1-2, 125.5-188.0. Arg. 59.

Table with 17 columns (Arg. 900 to 1080) and 29 rows of numerical data. Includes a final row with values 1260, 1230, 1200, 1170, 1140, 1110, 1080, and Arg. Includes a 'Returning repeat the last number' note and a 'Succ.' column.

TABLE 25 (cont.). Cols. 0-1, 63.0-188.0; 1-2, 0.0-125.0.

Arg. 59.

Table with 16 columns: Arg., 0, 1, v, and four sets of Cont./Succ. columns. Rows represent lunar data for various arguments from 63.0 to 94.0.

TABLE 25 (concl.). Cols. 3-4.

Arg. 59.

Table with 16 columns: Arg., 3, v, and four sets of Cont./Succ. columns. Rows represent lunar data for various arguments from 0.0 to 31.0.

TABLE 26. Cols. 0-29, 96-125.

Arg. 60.

Table with columns Arg. (0-14), 0-14, and Succ. (46-111). Rows include values for d, 0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0, 10.5, 11.0, 11.5, 12.0, 12.5, 13.0, 13.5, 14.0, 14.5, and Succ. values.

Table with columns Arg. (15-29), 15-29, and Succ. (81-110). Rows include values for d, 0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0, 10.5, 11.0, 11.5, 12.0, 12.5, 13.0, 13.5, 14.0, 14.5, and Succ. values.

TABLE 26 (cont.). Cols. 30-59, 66-95.

Arg. 60.

Table with columns Arg. (30-44), 30-44, and Succ. (76-90). Rows include values for d, 0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0, 10.5, 11.0, 11.5, 12.0, 12.5, 13.0, 13.5, 14.0, 14.5, and Succ. values.

Table with columns Arg. (45-59), 45-59, and Succ. (81-110). Rows include values for d, 0.0, 0.5, 1.0, 1.5, 2.0, 2.5, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5, 6.0, 6.5, 7.0, 7.5, 8.0, 8.5, 9.0, 9.5, 10.0, 10.5, 11.0, 11.5, 12.0, 12.5, 13.0, 13.5, 14.0, 14.5, and Succ. values.

TABLE 27 (concl.). Cols. 15-28, 44-52.

Arg. 61.

TABLE 28. Cols. 0-81, 188-204.

Arg. 62.

Arg.	15	16	17	18	v	19	20	21		Arg.	44	45	46	47	48	v	
	38	37	36	35		34	33	32	Succ.		9	8	7	6	5		Succ.
d									d	d						d	d
0.0	4964	4964	4963	4963	0	4963	4963	4962	27.5	0.0	4954	4954	4953	4953	4952	0	27.0
0.5	4939	4938	4938	4937	-1	4936	4935	4934	27.0	0.5	4913	4912	4910	4909	4908	-1	26.5
1.0	4884	4883	4881	4880	1	4878	4877	4876	26.5	1.0	4841	4839	4837	4836	4834	2	26.0
1.5	4798	4796	4794	4793	2	4791	4789	4787	26.0	1.5	4739	4737	4735	4733	4730	2	25.5
2.0	4684	4681	4679	4677	2	4674	4672	4669	25.5	2.0	4609	4607	4604	4601	4598	3	25.0
2.5	4542	4539	4536	4533	3	4530	4527	4524	25.0	2.5	4453	4450	4446	4443	4440	3	24.5
3.0	4374	4370	4367	4363	3	4360	4356	4353	24.5	3.0	4271	4268	4264	4260	4257	4	24.0
3.5	4182	4178	4174	4170	4	4166	4162	4159	24.0	3.5	4068	4064	4060	4055	4051	4	23.5
4.0	3969	3964	3960	3956	4	3952	3948	3943	23.5	4.0	3844	3840	3835	3831	3826	4	23.0
4.5	3737	3732	3728	3723	5	3719	3714	3710	23.0	4.5	3603	3599	3594	3589	3584	5	22.5
5.0	3490	3485	3480	3475	5	3470	3466	3461	22.5	5.0	3349	3344	3339	3334	3329	5	22.0
5.5	3230	3225	3220	3215	5	3210	3205	3200	22.0	5.5	3084	3078	3073	3068	3063	5	21.5
6.0	2961	2955	2950	2945	5	2940	2935	2930	21.5	6.0	2811	2806	2800	2795	2790	5	21.0
6.5	2686	2680	2675	2670	5	2665	2660	2654	21.0	6.5	2534	2529	2524	2518	2513	5	20.5
7.0	2408	2403	2398	2393	5	2387	2382	2377	20.5	7.0	2257	2252	2246	2241	2236	5	20.0
7.5	2132	2127	2122	2117	5	2112	2106	2101	20.0	7.5	1983	1978	1973	1968	1962	5	19.5
8.0	1861	1856	1851	1846	5	1841	1836	1830	19.5	8.0	1716	1711	1706	1701	1696	5	19.0
8.5	1597	1593	1588	1583	5	1578	1573	1568	19.0	8.5	1458	1453	1448	1444	1439	5	18.5
9.0	1346	1341	1336	1332	5	1327	1322	1318	18.5	9.0	1214	1209	1205	1200	1196	4	18.0
9.5	1108	1104	1100	1095	4	1091	1087	1082	18.0	9.5	986	981	977	973	969	4	17.5
10.0	888	884	881	877	4	873	869	865	17.5	10.0	777	773	769	766	762	4	17.0
10.5	689	686	682	679	4	675	672	668	17.0	10.5	590	586	583	580	576	3	16.5
11.0	513	510	506	503	3	500	497	494	16.5	11.0	427	424	421	418	415	3	16.0
11.5	362	359	356	354	3	351	349	346	16.0	11.5	290	288	286	283	281	2	15.5
12.0	237	235	233	231	2	229	227	225	15.5	12.0	182	180	178	176	174	2	15.0
12.5	142	140	139	137	1	136	134	133	15.0	12.5	102	101	100	98	97	1	14.5
13.0	76	75	74	73	-1	72	71	71	14.5	13.0	53	52	52	51	51	-1	14.0
13.5	41	41	40	40	0	40	39	39	14.0	13.5	35	35	35	35	35	0	13.5
14.0	37	38	38	38	0	38	39	39	13.5	14.0	48	49	50	50	51	+1	13.0
14.5	65	66	66	67	+1	68	69	70	13.0	14.5	93	94	95	96	97	1	12.5
15.0	123	124	126	127	1	128	130	131	12.5	15.0	168	169	171	173	174	2	12.0
15.5	211	213	215	217	2	219	221	223	12.0	15.5	272	274	276	279	281	2	11.5
16.0	328	331	333	336	3	338	341	344	11.5	16.0	404	407	410	413	415	3	11.0
16.5	473	476	479	482	3	485	488	491	11.0	16.5	503	507	510	513	516	3	10.5
17.0	644	647	651	654	3	658	661	665	10.5	17.0	747	751	754	758	762	4	10.0
17.5	838	841	845	849	4	853	857	861	10.0	17.5	953	957	961	965	969	4	9.5
18.0	1052	1057	1061	1065	4	1070	1074	1078	9.5	18.0	1178	1183	1187	1192	1196	4	9.0
18.5	1286	1290	1295	1300	5	1304	1309	1313	9.0	18.5	1420	1425	1430	1434	1439	5	8.5
19.0	1534	1539	1544	1549	5	1554	1559	1563	8.5	19.0	1676	1681	1686	1691	1696	5	8.0
19.5	1795	1800	1805	1810	5	1815	1820	1825	8.0	19.5	1942	1947	1952	1957	1962	5	7.5
20.0	2065	2070	2076	2081	5	2086	2091	2096	7.5	20.0	2215	2220	2226	2231	2236	5	7.0
20.5	2340	2346	2351	2356	5	2361	2366	2372	7.0	20.5	2492	2497	2503	2508	2513	5	6.5
21.0	2618	2623	2628	2634	5	2639	2644	2649	6.5	21.0	2769	2774	2780	2785	2790	5	6.0
21.5	2894	2899	2904	2909	5	2914	2919	2924	6.0	21.5	3043	3048	3053	3058	3063	5	5.5
22.0	3164	3169	3174	3180	5	3185	3190	3195	5.5	22.0	3309	3314	3319	3324	3329	5	5.0
22.5	3427	3432	3437	3441	5	3446	3451	3456	5.0	22.5	3566	3570	3575	3580	3584	5	4.5
23.0	3678	3682	3687	3691	5	3696	3700	3705	4.5	23.0	3808	3813	3817	3822	3826	4	4.0
23.5	3913	3918	3922	3926	4	3930	3935	3939	4.0	23.5	4035	4039	4043	4047	4051	4	3.5
24.0	4131	4135	4139	4143	4	4147	4151	4155	3.5	24.0	4242	4246	4249	4253	4257	4	3.0
24.5	4328	4332	4335	4339	3	4342	4346	4349	3.0	24.5	4427	4430	4433	4437	4440	3	2.5
25.0	4503	4506	4509	4512	3	4515	4518	4521	2.5	25.0	4587	4590	4593	4596	4598	3	2.0
25.5	4651	4654	4656	4659	3	4662	4664	4667	2.0	25.5	4721	4724	4726	4728	4730	2	1.5
26.0	4773	4775	4777	4779	2	4781	4783	4785	1.5	26.0	4827	4829	4831	4832	4834	2	1.0
26.5	4866	4867	4869	4870	1	4872	4873	4874	1.0	26.5	4904	4905	4906	4907	4908	1	0.5
27.0	4928	4929	4930	4931	+1	4932	4933	4934	0.5	27.0	4950	4950	4951	4952	4952	+1	0.0
27.5	4960	4961	4961	4961	0	4962	4962	4962	0.0								
Succ.	25	26	27	28		29	30	31		Succ.	1	2	3	4	5		
	28	27	26	25	v	24	23	22	Arg.		52	51	50	49	48	v	Arg.

Arg.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
	0	204	203	202	201	200	199	198	197	196	195	194	193	192	191	190	189	188	Succ.
d																			d
0.0	[400]	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	9.5
0.5	390	390	389	389	389	389	389	389	389	389	389	388	388	388	388	388	388	388	9.0
1.0	359	359	359	358	358	358	358	358	358	357	357	357	357	356	356	356	356	356	8.5
1.5	312	312	312	311	311	311	311	311	310	310	310	309	309	309	308	308	308	308	8.0
2.0	253	253	252	252	252	252	251	251	251	250	250	250	250	249	249	249	249	249	7.5
2.5	189	188	188	188	188	187	187	187	186	186	186	185	185	185	184	184	184	184	7.0
3.0	126	125	125	125	124	124	124	124	123	123	123	122	122	122	122	121	121	121	6.5
3.5	70	70	70	69	69	69	69	68	68	68	67	67	67	67	66	66	66	66	6.0
4.0	28	28	28	28	28	28	27	27	27	27	27	26	26	26	26	26	26	26	5.5
4.5	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	5.0
5.0	1	1	1	1	1	1	1	1	2	2	2	2	2	2	2	2	2	2	4.5
5.5	19	19	19	19	19	20	20	20	20	20	20	20	20	21	21	21	21	21	4.0
6.0	55	56	56	56	56	56	57	57	57	58	58	58	58	58	58	59	59	59	3.5
6.5	107	107	108	108	108	108	109	109	109	110	110	110	110	111	111	111	111	111	3.0
7.0	169	169	169	169	170	170	170	171	171	171	171	172	172	172	173				

TABLE 28 (concl.). Cols. 82-187.

Arg. 62.

Table 28 (concl.) columns 82-187. Arg. 62. Columns: Arg. (82-99), Succ., Arg. (187-170). Rows: d (0.0-9.0), Succ., Arg. (187-170).

Table 28 (concl.) columns 100-117. Arg. 62. Columns: Arg. (100-117), Succ., Arg. (169-152). Rows: d (0.0-9.0), Succ., Arg. (169-152).

Table 28 (concl.) columns 118-134. Arg. 62. Columns: Arg. (118-134), Succ., Arg. (151-135). Rows: d (0.0-9.0), Succ., Arg. (151-135).

TABLE 29.

Vert. Arg. 63.

Hor. Arg. 64.

Table 29. Vert. Arg. 63. Hor. Arg. 64. Columns: Hor. Arg. (0-16), Vert. Arg. (0.0-9.5), Succ., Hor. Arg. (16-0), Vert. Arg. (9.5-0.0), Succ. Rows: Hor. Arg. (0-16), Vert. Arg. (0.0-9.5), Succ., Hor. Arg. (16-0), Vert. Arg. (9.5-0.0), Succ.

TABLE 31 (concl.).

Vert. Arg. 67.

Hor. Arg. 68.

Hor. Arg.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	Hor. Arg.	
Vert. Arg.	d .0	d .2	d .4	d .1	d .4	d .1	d .3	d .0	d .2	d .4	d .1	d .4	d .1	d .3	d .0	d .2	d .4	d .1	d .4	d .1	d .3	Vert. Arg.	
d																						d	
0.0	23	24	24	24	25	25	24	24	24	23	23	23	23	23	23	23	23	23	24	24	24	0.0	
0.5	23	24	24	25	25	25	24	24	24	23	23	23	23	23	23	23	23	23	24	24	24	0.5	
1.0	24	24	25	25	25	25	24	24	24	23	23	23	23	23	23	23	23	23	24	25	25	1.0	
1.5	24	25	25	25	25	25	24	24	24	23	23	23	23	23	23	23	22	22	23	24	25	1.5	
2.0	24	25	25	25	25	25	24	24	24	23	23	23	23	23	22	22	22	22	23	24	25	2.0	
2.5	24	25	25	25	25	25	24	24	24	23	23	23	22	22	22	21	21	21	22	23	25	2.5	
3.0	24	24	24	25	25	25	24	24	23	23	22	22	22	22	22	21	21	21	22	23	25	3.0	
3.5	24	24	24	24	24	24	24	24	23	22	22	22	22	22	21	21	20	20	21	23	24	3.5	
4.0	24	24	24	24	24	24	23	23	22	22	22	21	21	21	20	20	20	20	21	22	24	4.0	
4.5	24	24	23	23	23	23	23	22	22	21	21	21	20	20	19	19	19	19	20	21	23	4.5	
5.0	24	23	23	23	23	23	22	22	21	21	21	20	20	19	18	18	18	18	19	21	23	5.0	
5.5	23	23	22	22	22	22	22	22	21	20	20	19	19	19	18	17	17	17	18	20	22	5.5	
6.0	23	22	22	22	21	21	21	21	20	19	19	18	18	18	17	17	17	18	19	21	22	6.0	
6.5	22	21	21	21	21	21	20	20	20	19	19	18	18	17	17	16	16	17	19	21	22	6.5	
7.0	21	20	20	20	20	20	20	20	19	18	18	17	17	16	15	15	15	16	18	20	21	7.0	
7.5	20	20	19	19	19	19	19	19	18	17	17	16	16	16	15	14	14	15	17	20	21	7.5	
8.0	20	19	18	18	18	18	18	17	17	16	16	15	15	15	14	14	14	15	16	19	20	8.0	
8.5	19	18	17	17	17	17	16	16	16	15	15	14	14	14	13	13	13	14	16	19	20	8.5	
9.0	18	17	16	16	16	16	16	16	15	15	14	14	14	13	13	12	12	13	15	18	20	9.0	
9.5	17	16	15	16	15	15	15	15	15	14	14	14	13	13	12	12	12	13	14	17	20	9.5	
10.0	16	15	15	15	14	14	14	15	14	14	14	13	13	12	12	11	11	11	12	14	16	10.0	
10.5	15	14	14	14	13	13	13	14	14	13	13	12	12	12	11	11	11	11	12	13	15	10.5	
11.0	14	13	13	13	13	13	13	13	13	12	12	12	11	11	11	11	11	11	12	14	15	11.0	
11.5	13	12	12	12	12	12	12	13	13	12	12	12	11	11	11	11	11	10	11	12	14	11.5	
12.0	12	12	11	11	11	11	11	12	12	12	11	11	11	11	10	10	10	10	11	13	15	12.0	
12.5	11	11	11	11	11	11	11	12	12	12	11	11	11	10	10	10	10	10	11	12	15	12.5	
13.0	11	11	10	10	10	10	11	11	11	11	11	10	10	10	10	10	10	10	10	11	15	13.0	
13.5	11	10	10	10	10	10	10	11	11	11	11	11	10	10	10	10	10	10	10	11	15	13.5	
14.0	10	10	9	9	9	9	10	10	11	11	11	11	10	10	10	10	10	10	10	10	15	14.0	
14.5	10	9	9	9	9	9	10	10	11	11	11	11	11	11	11	11	10	10	9	9	15	14.5	
15.0	9	9	9	9	9	9	10	10	11	11	11	11	11	11	11	11	10	10	9	9	15	15.0	
15.5	9	9	9	9	9	9	10	10	11	11	11	11	11	11	11	11	12	11	11	10	9	15.5	
16.0	9	9	9	9	9	9	10	11	11	12	12	12	12	12	12	12	11	10	9	9	16	16.0	
16.5	9	9	9	9	9	9	10	11	12	12	12	12	12	12	13	12	12	11	9	9	16	16.5	
17.0	9	9	9	9	9	9	10	10	11	12	12	12	12	12	13	13	12	11	10	9	17	17.0	
17.5	10	10	10	9	10	10	11	11	12	12	13	13	13	13	14	14	13	12	10	9	17	17.5	
18.0	10	10	10	10	10	10	11	11	12	13	13	13	14	14	15	14	14	12	10	9	18	18.0	
18.5	10	11	11	10	11	11	11	12	13	13	14	14	14	15	15	15	14	12	11	9	18	18.5	
19.0	11	11	11	11	11	12	12	13	14	14	15	15	15	16	16	15	15	13	11	9	19	19.0	
19.5	11	12	12	12	13	13	13	14	14	14	15	16	16	17	17	16	16	14	12	10	19	19.5	
20.0	12	12	13	13	13	14	14	15	15	16	16	17	17	18	18	17	17	15	12	10	20	20.0	
20.5	12	13	14	14	14	14	15	16	16	17	17	18	18	18	18	18	17	15	13	11	20	20.5	
21.0	13	14	14	15	15	15	16	17	17	18	18	19	19	19	19	18	16	13	11	21	21	21.0	
21.5	14	15	15	15	15	16	16	17	17	18	18	19	19	20	20	19	17	14	12	21	21	21.5	
22.0	15	16	16	16	16	17	17	18	18	19	19	20	20	21	21	20	18	15	13	22	22	22.0	
22.5	16	17	17	17	17	18	18	19	20	20	21	21	21	21	21	20	18	16	13	22	22	22.5	
23.0	17	18	18	18	18	19	20	20	21	21	22	22	22	22	22	21	19	17	14	23	23	23.0	
23.5	18	19	19	19	19	19	20	20	21	21	22	22	22	22	22	21	19	17	15	23	23	23.5	
24.0	19	20	20	20	20	20	20	19	20	20	21	21	22	22	23	23	22	20	18	16	24	24.0	
24.5	20	20	21	21	21	21	21	20	21	21	22	22	22	23	23	23	23	21	19	17	24	24.5	
25.0	20	21	22	22	22	22	22	21	21	21	22	22	23	23	23	23	22	20	18	25	25	25.0	
25.5	21	22	22	22	22	22	22	21	22	22	22	23	23	23	24	24	23	22	20	18	25	25.5	
26.0	22	23	23	23	23	23	22	22	22	22	23	23	23	23	24	24	24	23	21	19	26	26.0	
26.5	23	23	24	24	24	23	23	23	23	23	23	23	23	23	24	24	24	23	22	20	26	26.5	
27.0	23	24	24	24	24	23	23	23	23	23	23	23	23	23	24	24	24	23	21	27	27	27.0	
27.5	24																					27	27.5
Succ.	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	0	1	Succ.	

TABLE 32.

Vert. Arg. 69.

Hor. Arg. 70.

Hor. Arg.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	Hor. Arg.
Vert. Arg.	d .0	d .2	d .3	d .0	d .1	d .3	d .4	d .1	d .2	d .4	d .0	d .2	d .4	d .0	d .2	d .3	d .0	d .1	d .3	d .4	d .1	Vert. Arg.
d																						d
0.0	14	13	13	11	10	10	10	10	11	12	12	12	12	13	13	12	11	10	10	11	13	0.0
0.5	14	13	13	11	10	10	10	10	11	12	12	12	12	13	13	12	11	10	10	11	13	0.5
1.0	14	14	14	12	11	11	11	11	12	13	14	14	14	13	12	11	10	10	11	13	16	1.0
1.5	14	14	14	13	12	12	12	12	13	14	14	14	14	13	12	11	10	11	11	13	16	1.5
2.0	14	14	14	13	12	12	12	12	13	14	15	15	15	14	13	12	11	11	12	14	16	2.0
2.5	15	14	14	14	13	13	13	13	14	15	16	16	16	15	14	13	12	12	14	17	18	2.5
3.0	15	15	15	14	13	13	14	14	15	16	16	16	16	15	14	13	12	12	14	17	18	3.0
3.5	15	15	15	14	14	14	14	14	15	16	16	16	16	15	14	13	12	12	15	17	19	3.5
4.0	15	15	16	15	15	15																

TABLE 32 (concl.).

Vert. Arg. 69.

Hor. Arg. 70.

Hor. Arg.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	Hor. Arg.
Vert. Arg.	d 2	d 4	d 1	d 2	d 4	d 0	d 2	d 3	d 0	d 1	d 3	d 0	d 1	d 3	d 4	d 1	d 2	d 4	d 0	d 2	d 3	Vert. Arg.
0.0	14	13	13	13	15	17	19	20	19	18	17	16	16	17	18	18	18	17	16	15	0.0	
0.5	15	14	13	13	15	17	19	20	19	18	17	16	16	17	18	18	18	17	16	15	0.5	
1.0	16	15	14	14	16	18	20	21	20	19	18	17	17	18	19	19	19	18	17	16	1.0	
1.5	16	15	14	14	16	18	20	21	20	19	18	17	17	18	19	20	20	19	18	17	1.5	
2.0	17	16	15	14	16	18	20	22	21	20	19	18	18	19	20	20	20	19	18	17	2.0	
2.5	17	16	15	15	16	18	20	22	21	21	20	18	18	19	20	20	20	19	17	16	2.5	
3.0	18	17	16	15	16	18	20	22	21	21	20	19	19	19	20	21	21	20	19	17	3.0	
3.5	18	17	16	15	16	18	20	22	22	22	20	19	19	19	20	21	21	20	19	17	3.5	
4.0	19	18	16	16	17	18	20	22	22	22	21	19	19	19	20	21	21	20	19	17	4.0	
4.5	19	18	17	16	17	18	20	22	22	22	21	20	19	19	20	20	20	19	17	16	4.5	
5.0	19	19	17	16	17	18	19	21	22	22	21	20	19	19	20	20	19	18	17	16	5.0	
5.5	20	19	17	16	17	17	19	21	22	22	21	20	19	19	20	20	19	18	17	16	5.5	
6.0	20	19	18	16	16	17	19	21	21	22	21	20	19	18	19	19	19	18	17	16	6.0	
6.5	20	20	18	16	16	16	18	20	21	22	21	20	19	18	18	19	18	17	16	16	6.5	
7.0	20	20	18	16	16	16	18	19	20	21	20	19	18	18	18	18	18	17	16	16	7.0	
7.5	20	20	18	16	15	15	17	19	20	21	20	19	18	17	17	18	18	17	16	16	7.5	
8.0	20	19	18	16	15	15	17	18	19	20	19	19	18	17	17	17	17	16	16	16	8.0	
8.5	20	19	18	16	15	14	16	17	18	19	19	19	17	16	16	16	16	16	15	15	8.5	
9.0	19	19	18	16	15	14	15	16	17	18	18	18	17	16	15	15	16	16	15	15	9.0	
9.5	19	19	17	15	14	13	14	15	17	18	18	18	16	15	15	15	15	15	15	15	9.5	
10.0	19	19	17	15	14	13	14	14	16	17	17	16	14	14	14	15	15	15	15	15	10.0	
10.5	18	18	17	15	13	12	13	13	15	16	16	17	15	14	13	13	14	14	14	15	10.5	
11.0	18	18	17	15	13	12	12	12	14	15	15	16	15	13	12	12	13	14	14	15	11.0	
11.5	17	17	16	14	12	11	11	12	14	15	15	15	14	13	12	12	13	14	14	15	11.5	
12.0	17	17	16	14	12	10	10	11	13	14	14	14	13	12	11	11	12	13	13	14	12.0	
12.5	16	16	15	14	12	10	10	10	12	13	13	14	13	12	11	11	11	12	13	14	12.5	
13.0	15	16	15	13	11	9	9	9	11	12	12	13	12	11	10	10	11	12	13	14	13.0	
13.5	15	15	14	13	11	9	9	8	10	11	12	13	12	11	10	9	10	11	12	13	13.5	
14.0	14	15	14	13	11	9	8	7	9	10	11	12	11	10	9	9	10	11	12	13	14.0	
14.5	14	14	13	12	10	8	8	7	9	10	11	12	11	10	9	8	9	10	12	13	14.5	
15.0	13	14	13	12	10	8	7	6	8	9	10	11	10	9	8	8	9	10	11	12	15.0	
15.5	12	13	13	12	10	8	7	6	8	9	10	11	10	9	8	7	8	9	11	12	15.5	
16.0	12	13	12	12	9	7	6	5	7	8	9	10	9	8	7	8	9	11	12	13	16.0	
16.5	11	12	12	12	9	7	6	5	7	8	9	10	9	8	7	8	9	10	12	13	16.5	
17.0	11	12	12	11	9	7	6	5	6	8	9	9	8	7	7	8	9	10	12	13	17.0	
17.5	10	11	11	11	9	7	6	5	6	7	8	9	9	8	7	8	9	10	12	13	17.5	
18.0	10	11	11	11	9	7	6	5	6	7	8	9	9	8	7	8	9	10	12	12	18.0	
18.5	9	10	11	11	10	8	6	5	6	7	8	9	9	8	7	8	9	10	12	12	18.5	
19.0	9	10	11	11	10	8	7	6	6	7	8	9	9	8	8	8	9	10	12	12	19.0	
19.5	9	10	11	11	10	8	7	6	6	7	8	9	9	9	9	9	9	11	12	12	19.5	
20.0	9	10	11	11	10	9	8	6	7	7	8	9	9	9	9	9	10	11	12	12	20.0	
20.5	8	10	11	12	11	9	8	7	7	7	8	9	9	9	9	9	10	11	12	12	20.5	
21.0	8	10	11	12	11	10	9	7	7	7	8	9	9	10	10	10	11	11	12	12	21.0	
21.5	8	10	11	12	12	10	9	8	8	8	9	10	10	10	10	10	11	12	12	12	21.5	
22.0	8	10	11	13	12	11	10	9	8	8	9	10	11	11	10	11	12	13	13	12	22.0	
22.5	9	10	12	13	13	12	11	9	9	9	10	10	11	12	12	11	12	13	13	12	22.5	
23.0	9	10	12	14	14	13	11	10	9	9	10	11	12	13	13	12	12	13	13	12	23.0	
23.5	9	10	12	14	14	14	12	11	10	10	11	12	13	13	13	13	13	13	13	12	23.5	
24.0	9	11	12	15	15	14	13	12	11	10	11	12	13	14	14	13	13	13	13	12	24.0	
24.5	10	11	13	15	15	15	14	13	12	11	12	12	14	15	15	14	14	14	13	12	24.5	
25.0	10	11	13	15	16	16	15	14	13	12	13	13	14	16	15	15	14	14	14	13	25.0	
25.5	11	12	13	16	17	17	16	15	14	13	14	14	15	16	16	15	15	14	14	13	25.5	
26.0	11	12	14	16	17	18	17	16	15	14	14	15	16	17	17	16	15	14	14	13	26.0	
26.5	12	13	14	16	18	18	17	16	15	14	15	15	16	17	17	16	15	14	14	13	26.5	
27.0	12	13	14	17	18	19	18	17	16	15	16	16	17	18	18	17	16	15	14	13	27.0	
27.5	15				19						17										27.5	
Succ.	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	0	1	Succ.

TABLE 33.

Arg. S (in units of 100%).

For inner arguments the function is negative.

Arg.	Arg.	0	1	2	3	4	v	5	6	7	8	9	10	v	Arg.	Arg.
0	6480	0	897	1794	2691	3588	+897	4484	5381	6278	7175	8072	8970	+897	12950	6470
10	6490	8970	9866	*0763	*1660	*2556	897	1 3453	4350	5247	6144	7041	7938	897	12940	6460
20	6500	1 7938	8834	9731	*0628	*1525	897	2 2422	3319	4215	5112	6009	6906	897	12930	6450
30	6510	2 6906	7803	8699	9596	*0493	897	3 1390	2286	3183	4080	4977	5874	897	12920	6440
40	6520	3 5874	6770	7667	8564	9460	897	4 0357	1254	2150	3047	3944	4840	897	12910	6430
50	6530	4 4840	5737	6634	7530	8427	897	4 9323	*0220	*1117	*2013	*2910	*3806	897	12900	6420
60	6540	5 3806	4703	5599	6496	7392	896	5 8289	9185	*0082	*0978	*1874	*2771	896	12890	6410
70	6550	6 2771	3667	4564	5460	6356	896	6 7252	8149	9045	9941	*0838	*1734	896	12880	6400
80	6560	7 1734	2630	3526	4422	5319	896	7 6215	7111	8007	8903	9799	*0695	896	12870	6390
90	6570	8 0695	1591	2487	3383	4279	896	8 5175	6071	6967	7863	8759	9655	896	12860	6380
100	6580	8 9655	*0551	*1446	*2342	*3238	896	9 4134	5029	5925	6821	7716	8612	896	12850	6370
110	6590	9 8612	9508	*0403	*1299	*2194	896	10 3090	3985	4881	5776	6672	7567	895	12840	6360
120	6600	10 7567	8463	9358	*0253	*1149	895	11 2044	2939	3834	4730	5625	6520	895	12830	6350
130	6610	11 6520	7415	8310	9205	*0100	895	12 0995	1890	2785	3680	4575	5470	895	12820	6340
140	6620	12 5470	6365	7260	8154	9049	895	12 9944	*0838	*1733	*2628	*3522	*441			

TABLE 33 (cont.).

Arg. S (in units of 100'').

For inner arguments the function is negative.

Table with columns for Arg., Arg., 0, 1, 2, 3, 4, v, 5, 6, 7, 8, 9, 10, v, Arg., Arg. and rows of numerical data.

TABLE 33 (cont.).

Arg. S (in units of 100'').

For inner arguments the function is negative.

Table with columns for Arg., Arg., 0, 1, 2, 3, 4, v, 5, 6, 7, 8, 9, 10, v, Arg., Arg. and rows of numerical data.

TABLE 33 (cont.).

Arg. S (in units of 100°0).

For inner arguments the function is negative.

Table with columns: Arg., Arg., 0, 1, 2, 3, 4, v, 5, 6, 7, 8, 9, 10, v. Rows include values for years 1950-2590.

TABLE 33 (concl.).

Arg. S (in units of 100°0).

For inner arguments the function is negative.

Table with columns: Arg., Arg., 0, 1, 2, 3, 4, v, 5, 6, 7, 8, 9, 10, v. Rows include values for years 2600-3230.

TABLE 34.

Vert. Arg. D.

Hor. Arg. I.

Arg.	0 v	2 v	4 v	6 v	8 v	10 v	12 v	14 v	16 v	18 v	20 v	22 v	24 v	26 v	28 v	Arg.
-0.5	79 -1	79 0	81 +1	84 +2	90 +3	97 +4	106 +5	116 +5	127 +6	139 +6	152 +6	164 +6	177 +6	190 +6	201 +6	30.5
0.0	83 2	80 -1	79 0	80 +1	83 +2	87 3	93 4	101 4	110 5	121 5	132 6	144 6	157 6	169 6	181 6	30.0
+0.5	92 3	86 3	82 -2	80 -1	79 0	81 +1	84 2	89 3	96 4	105 4	114 5	125 6	136 6	149 6	161 6	29.5
1.0	104 5	96 4	88 3	83 2	80 -1	78 0	79 +1	82 2	86 3	92 4	100 4	109 5	119 5	130 6	142 6	29.0
1.5	118 6	108 5	98 4	91 3	85 2	81 -2	79 -1	82 2	81 +1	84 2	90 3	98 4	107 5	117 5	128 6	28.5
2.0	132 6	121 6	110 5	101 4	93 3	87 3	83 2	81 -1	80 0	82 2	86 2	92 3	100 4	109 5	119 5	28.0
2.5	145 6	133 6	122 5	112 5	103 4	96 3	90 2	86 1	85 0	85 +1	88 2	92 3	99 4	107 4	117 5	27.5
3.0	155 6	144 6	133 5	122 5	113 4	105 3	99 3	95 2	92 -1	92 0	94 1	97 2	103 3	110 4	119 5	27.0
3.5	162 5	152 5	142 5	132 5	123 4	116 3	109 3	105 2	102 1	101 0	102 1	105 2	110 3	117 4	125 5	26.5
4.0	165 4	156 4	148 4	139 4	131 4	124 3	119 2	115 2	112 1	111 0	112 1	115 2	119 3	126 4	134 4	26.0
4.5	164 3	157 4	150 3	144 3	137 3	131 3	126 2	123 1	121 -1	120 0	121 1	124 2	128 3	135 4	142 4	25.5
5.0	161 2	156 3	151 3	145 3	140 2	136 2	132 2	129 1	127 0	127 0	128 1	131 2	135 3	142 4	149 4	25.0
5.5	156 2	153 2	149 2	144 2	142 2	138 2	136 2	133 1	133 1	132 0	132 0	134 1	136 2	140 2	146 3	24.5
6.0	150 -1	148 1	146 1	144 1	141 1	138 1	137 1	135 -1	134 0	135 0	136 1	139 2	143 2	148 3	154 4	24.0
6.5	145 0	144 -1	143 -1	141 -1	140 -1	138 -1	137 -1	136 0	136 0	137 1	140 1	143 2	147 3	153 4	159 5	23.5
7.0	141 0	141 0	141 0	140 0	139 0	138 0	137 0	137 0	136 0	136 0	137 +1	139 1	141 2	145 3	150 4	23.0
7.5	139 0	140 0	140 0	140 0	139 0	138 0	138 0	137 0	137 0	138 0	138 +1	140 +1	142 1	146 2	151 3	22.5
8.0	139 +1	140 0	141 0	141 0	141 0	141 0	141 0	140 0	140 0	139 0	139 0	140 0	141 +1	143 +1	147 2	22.0
8.5	140 1	142 +1	143 +1	144 0	145 0	146 0	145 0	145 0	144 0	144 0	143 0	142 0	142 0	142 0	142 0	21.5
9.0	142 1	145 1	147 1	149 +1	150 +1	152 0	152 0	152 0	152 0	151 0	150 -1	148 -1	147 -1	146 0	146 0	21.0
9.5	145 2	148 2	151 2	154 1	157 1	159 +1	160 +1	161 0	161 0	161 0	160 -1	158 -1	157 -1	155 -1	153 -1	20.5
10.0	146 2	151 2	156 2	160 2	164 2	168 2	170 1	172 +1	173 0	173 0	173 0	172 -1	170 1	168 1	165 1	20.0
10.5	145 3	152 3	158 3	164 3	170 3	175 2	179 2	182 1	185 +1	186 0	186 0	185 -1	183 1	180 1	180 1	19.5
11.0	143 4	151 4	158 4	166 4	174 4	180 3	186 3	192 2	196 2	199 +1	201 +1	201 0	201 0	200 -1	198 1	19.0
11.5	138 4	146 5	156 5	165 5	174 4	183 4	191 4	198 3	204 3	209 2	212 2	215 +1	216 0	216 0	214 -1	18.5
12.0	129 5	139 5	149 5	160 5	171 5	181 5	191 5	200 4	208 4	215 3	220 2	225 2	228 +1	229 0	230 0	18.0
12.5	119 5	129 5	140 6	151 6	163 6	175 6	186 6	197 5	207 5	216 4	223 3	230 3	234 2	238 +1	240 +1	17.5
13.0	108 4	118 5	128 6	140 6	152 6	164 6	177 6	188 6	200 5	210 5	220 4	228 4	235 3	240 2	245 2	17.0
13.5	97 4	106 5	115 5	126 6	138 6	150 6	163 6	176 6	188 6	200 6	211 5	220 5	229 4	237 3	243 3	16.5
14.0	88 3	94 4	103 4	112 5	122 5	134 6	146 6	159 6	171 6	184 6	196 6	207 5	217 5	226 4	234 4	16.0
14.5	82 +2	86 2	92 3	99 4	108 5	118 5	129 6	140 6	153 6	165 6	177 6	190 6	201 6	212 5	221 5	15.5
15.0	80 0	81 +1	84 +2	88 3	95 4	103 4	112 5	122 5	134 6	146 6	158 6	170 6	182 6	194 6	205 5	15.0
15.5	82 -2	80 0	80 0	82 +1	86 2	91 3	98 4	107 5	117 5	128 6	140 6	152 6	164 6	176 6	188 6	14.5
16.0	88 3	84 -2	81 -1	80 0	82 +1	85 2	90 3	97 4	105 4	115 5	125 6	137 6	149 6	161 6	174 6	14.0
16.5	97 4	91 3	86 2	83 -1	82 0	83 +1	86 2	91 3	97 4	106 5	116 5	126 6	138 6	150 6	163 6	13.5
17.0	108 4	100 4	94 3	89 2	86 -1	86 0	87 1	90 2	95 3	102 4	111 5	121 5	132 6	144 6	157 6	13.0
17.5	119 5	110 4	103 3	98 2	94 1	92 0	92 +1	94 2	98 3	104 3	112 4	122 5	132 6	144 6	156 6	12.5
18.0	129 5	121 4	114 3	107 3	103 2	100 -1	100 0	101 1	104 2	110 3	117 4	126 5	136 5	147 6	160 6	12.0
18.5	138 4	129 4	122 3	116 3	112 2	110 1	109 0	110 1	112 2	117 3	124 4	132 4	142 5	153 6	165 6	11.5
19.0	143 4	136 3	130 3	125 2	121 2	118 1	118 0	119 1	121 2	126 3	132 4	140 4	149 5	160 6	171 6	11.0
19.5	146 3	140 3	135 2	131 2	127 1	125 -1	125 0	126 1	128 2	132 2	138 3	146 4	154 5	165 5	176 6	10.5
20.0	146 2	142 2	138 2	134 2	132 1	130 0	130 0	131 1	133 2	137 2	142 3	149 4	158 5	168 5	178 6	10.0
20.5	145 2	141 2	138 2	135 1	133 1	132 0	132 0	133 1	135 1	139 2	144 3	150 4	158 4	167 5	178 5	9.5
21.0	142 1	140 1	138 1	135 1	134 1	133 0	133 0	134 +1	136 1	139 2	143 2	149 3	156 4	164 4	173 5	9.0
21.5	140 1	138 1	136 1	135 1	133 1	132 0	132 0	133 0	134 1	136 2	140 2	144 3	150 3	158 4	166 4	8.5
22.0	139 -1	138 -1	136 1	135 1	134 1	133 0	132 0	132 0	133 +1	134 +1	137 2	140 2	145 3	151 3	158 4	8.0
22.5	139 0	138 0	137 -1	136 -1	135 1	134 0	133 0	133 0	133 0	133 0	134 +1	136 1	140 2	144 2	149 3	7.5
23.0	141 0	141 0	140 0	140 0	139 -1	138 -1	136 -1	135 0	134 0	134 0	135 +1	137 +1	140 1	143 2	143 2	7.0
23.5	145 0	146 0	146 0	146 0	145 0	144 -1	143 1	142 -1	140 -1	139 0	138 0	138 0	139 +1	141 +1	141 +1	6.5
24.0	150 +1	152 +1	153 0	154 0	154 0	153 -1	151 1	150 1	148 -1	146 -1	145 -1	144 0	143 0	143 0	143 0	6.0
24.5	156 2	159 1	162 +1	164 +1	165 0	165 0	164 -1	162 1	160 1	158 1	156 1	154 -1	152 -1	151 0	151 0	5.5
25.0	161 2	166 2	170 2	174 2	176 +1	178 +1	179 0	179 0	176 1	174 1	172 1	169 1	166 1	164 -1	164 -1	5.0
25.5	164 3	171 3	177 3	183 2	187 2	191 1	193 +1	194 0	195 0	194 -1	192 1	190 1	188 1	184 2	181 2	4.5
26.0	165 4	174 4	182 4	190 4	196 3	202 2	206 2	209 +1	211 +1	212 0	211 -1	209 -1	207 1	204 2	201 2	4.0
26.5	162 5	173 5	183 5	192 4	201 4	208 3	215 3	220 2	224 2	226 +1	227 0	227 0	226 -1	224 1	221 2	3.5
27.0	155 6	167 6	179 6	190 5	201 5	210 5	219 4	226 3	232 3	236 2	239 +1	241 0	241 0	240 -1	238 -1	3.0
27.5	145 6	158 6	170 6	183 6	195 6	206 5	216 5	226 4	234 4	240 3	245 2	248 +1	250 +1	251 0	251 0	2.5
28.0	132 6	145 6	158 7	171 7	184 6	196 6	208 6	219 5	228 4	237 4	244 3	249 2	253 2	256 +1	258 0	2.0
28.5	118 6	130 6	142 6	155 6	168 6	181 6	193 6	205 6	216 5	226 5	235 4	243 3	249 3	254 2	257 +1	1.5
29.0	104 5	114 5	125 6	137 6	149 6	162 6	175 6	187 6	199 6	210 5	221 5	230 4	238 4	245 3	250 2	1.0
29.5	92 3	100 4	109 5	119 5	130 6	142 6	154 6	167 6	179 6	191 6	202 6	213 5	223 5	231 4	239 3	+0.5
30.0	83 2	88 3	95 4	103 4	112 5	123 5	134 6	146 6	158 6	171 6	183 6	194 6	205 5	215 5	225 4	0.0
30.5	79 +1	81 +2	85 +2	91 +3	98 +4	107 +5	117 +5	128 +6	140 +6	152 +6	164 +6	176 +6	188 +6	200 +5	210 +5	

TABLE 34 (concl.), Vert. Arg. D. Hor. Arg. 1.

Table with columns: Arg., 60 v, 62 v, 64 v, 66 v, 68 v, 70 v, Arg. and rows of numerical data from -0.5 to 30.5.

TABLE 35, Vert. Arg. D. Hor. Arg. 2.

Table with columns: Arg., 0 v, 78, 4 v, 82, 8 v, 86, Arg. and rows of numerical data from -0.5 to 30.5.

TABLE 35 (concl.),

Vert. Arg. D.

Hor. Arg. 2.

Table with columns: Arg., 12 v, 90, 16 v, 94, 20 v, 98, 24 v, 102, 28 v, 106, 32 v, 110, 36 v, 114, 40 v, Arg. and rows of numerical data from -0.5 to 30.5.

TABLE 36.

Vert. Arg. D.

Hor. Arg. 3.

Arg.	0 v 58	2 v 60	4 v 62	6 v 64	8 v 66	10 v 68	12 v 70	14 v 72	Arg.
-0.5	260-2 138	256-2 143	252-3 147	246-3 153	241-3 159	234-3 166	228-3 173	221-4 180	30.5
0.0	268-1 130	267-1 132	265-1 134	262-2 137	258-2 141	254-2 146	249-3 151	243-3 157	30.0
+0.5	267+1 131	269 0 130	269 0 130	269 0 130	268-1 131	266-1 133	263-2 136	260-2 140	29.5
1.0	258 2 141	261+2 137	265+1 134	267+1 132	269+1 130	270 0 129	270 0 129	269-1 130	29.0
1.5	240 3 159	246 3 153	251 3 147	256 2 143	260 2 138	264+2 185	267+1 132	269+1 130	28.5
2.0	218 4 182	225 3 175	231 3 168	238 3 161	244 3 155	249 3 150	254 2 145	258 2 140	28.0
2.5	193 4 207	200 4 200	207 4 192	214 4 185	221 3 178	228 3 171	234 3 165	240 3 159	27.5
3.0	169 3 231	175 3 225	182 3 218	189 3 211	196 4 204	202 3 197	209 3 190	216 3 183	27.0
3.5	148 2 252	153 2 248	158 3 243	163 3 237	169 3 231	175 3 225	182 3 218	188 3 212	26.5
4.0	133+1 268	135+1 266	137+1 263	140+2 260	144 2 256	149 2 252	154 3 246	160 3 240	26.0
4.5	124-1 276	123 0 278	123 0 278	123 0 278	124+1 276	126+1 274	130+2 271	133 2 267	25.5
5.0	123 3 277	118-2 282	114-2 286	112-1 289	110-1 291	109 0 292	109 0 291	111+1 290	25.0
5.5	128 4 272	120 4 280	113 3 287	107 3 294	102 2 299	98-2 303	96-1 305	94 0 307	24.5
6.0	139 6 266	128 5 271	118 5 282	109 4 291	101 4 299	94 3 306	89 3 312	84-2 317	24.0
6.5	155 7 244	142 6 257	130 6 270	118 6 282	107 5 293	98 5 303	89 4 311	82 3 319	23.5
7.0	175 8 224	160 7 238	146 7 253	132 7 267	119 6 280	108 6 292	97 5 303	87 5 313	23.0
7.5	197 8 202	181 8 217	166 8 233	151 7 248	136 7 262	123 7 276	110 6 289	99 6 301	22.5
8.0	219 8 180	204 8 195	188 8 211	173 8 226	158 7 241	143 7 256	129 7 270	116 6 283	22.0
8.5	240 7 159	225 7 173	210 7 188	195 7 203	180 7 218	166 7 233	152 7 247	139 6 261	21.5
9.0	258 6 141	245 7 154	232 7 167	218 7 181	204 7 194	190 7 208	176 7 222	163 7 236	21.0
9.5	271 5 128	261 5 138	250 6 149	238 6 161	226 6 173	214 6 185	202 6 197	189 6 210	20.5
10.0	279 3 121	272 4 128	263 4 136	255 5 145	245 5 154	235 5 164	224 5 175	214 5 185	20.0
10.5	280-2 120	276-2 124	271 3 129	265 3 135	259 3 141	252 4 148	244 4 156	236 4 164	19.5
11.0	274 0 127	273 0 127	272-1 129	269-1 131	266-2 134	262 2 138	258 2 142	252 3 148	19.0
11.5	261+1 139	264+1 137	265+1 135	266 0 134	266 0 134	266-1 135	264-1 136	262-1 138	18.5
12.0	242 3 158	247 2 153	252 2 149	256+2 145	258+1 142	261+1 140	263+1 138	264 0 137	18.0
12.5	220 3 181	226 3 174	232 3 168	238 3 162	244 3 157	249 2 152	253 2 148	257+2 144	17.5
13.0	195 4 205	202 4 198	209 4 191	216 3 184	223 3 178	230 3 171	236 3 165	242 3 159	17.0
13.5	171 3 229	178 3 222	185 4 215	192 4 208	199 4 201	207 4 194	214 4 187	221 3 180	16.5
14.0	151 2 248	156 3 243	162 3 237	168 3 231	175 3 225	182 4 218	190 4 211	197 4 204	16.0
14.5	138+1 261	141+2 258	145 2 254	149 2 250	155 3 245	160 3 240	166 3 234	173 3 228	15.5
15.0	133 0 265	134 0 265	135+1 264	137+1 262	140+1 259	143 2 256	147 2 252	152 2 248	15.0
15.5	138-1 261	136-1 263	134-1 265	133 0 265	133 0 265	134+1 265	136+1 263	138+1 261	14.5
16.0	151 2 248	146 2 253	142 2 257	139-2 260	136-1 263	134-1 265	133 0 266	133 0 266	14.0
16.5	171 3 229	164 3 235	158 3 241	153 3 246	148 2 251	144 2 256	140-2 259	137-1 262	13.5
17.0	195 4 205	187 4 212	180 3 219	174 3 226	167 3 232	161 3 238	155 3 244	150 2 249	13.0
17.5	220 3 181	213 3 187	206 3 194	199 3 201	192 3 208	185 3 215	178 3 221	172 3 228	12.5
18.0	242 3 158	237 3 163	231 3 169	225 3 175	218 3 182	212 3 188	205 3 195	198 3 202	12.0
18.5	261-1 139	258-2 142	254 2 146	250 2 150	245 3 156	239 3 161	233 3 167	226 3 173	11.5
19.0	274 0 127	272 0 127	272-1 128	270-1 130	268-2 133	264 2 136	260 2 141	255 3 146	11.0
19.5	280+2 120	283+1 118	285+1 116	286 0 115	286 0 115	285-1 116	283-1 118	280-2 120	10.5
20.0	279 3 121	285 3 115	291 2 110	295+2 106	298+1 103	300+1 101	301 0 100	300 0 100	10.0
20.5	271 5 128	281 4 119	289 4 111	297 3 103	303 3 97	308 2 92	312+2 89	315+1 86	9.5
21.0	258 6 141	270 6 129	281 5 118	292 5 108	301 4 99	309 4 91	316 3 85	322 2 79	9.0
21.5	240 7 159	254 7 145	268 6 132	280 6 119	292 6 108	303 5 97	312 4 88	320 4 80	8.5
22.0	219 8 180	234 8 164	249 7 150	264 7 135	278 7 122	290 6 109	302 5 98	313 5 88	8.0
22.5	197 8 202	213 8 186	228 8 170	243 7 155	258 7 141	272 7 127	286 6 114	298 6 102	7.5
23.0	175 8 224	190 8 208	206 8 193	221 8 178	236 7 163	250 7 148	264 7 135	278 6 122	7.0
23.5	155 7 244	169 7 230	183 7 215	198 7 201	212 7 187	226 7 172	240 7 159	254 7 145	6.5
24.0	139 6 260	151 6 249	163 6 236	175 6 224	188 6 210	202 7 197	214 6 184	227 6 172	6.0
24.5	128 4 272	137 5 263	140 5 253	156 5 243	167 5 232	178 6 221	190 6 209	201 6 198	5.5
25.0	123 3 277	128 3 272	135 3 265	142 4 258	150 4 250	158 4 241	168 5 232	177 5 222	5.0
25.5	124+1 276	127+1 274	130+2 270	134+2 266	138 3 261	144 3 256	150 3 250	157 4 243	4.5
26.0	133-1 268	132 0 268	132 0 268	132 0 268	134+1 266	136+1 264	139+2 261	143+2 257	4.0
26.5	148 2 252	144-2 256	141-1 259	139-1 262	137-1 263	136 0 264	136 0 264	136 0 264	3.5
27.0	169 3 231	163 3 237	158 3 243	153 2 248	148 2 252	145-2 256	141-1 260	139-1 262	3.0
27.5	193 4 207	186 4 214	179 3 222	172 3 228	166 3 235	160 3 241	154 3 247	149 2 252	2.5
28.0	218 4 182	210 4 190	203 4 197	196 4 205	188 4 212	181 4 220	174 3 227	167 3 234	2.0
28.5	240 3 159	234 3 166	227 4 173	220 4 180	213 4 187	205 4 195	198 4 203	190 4 211	1.5
29.0	258 2 141	253 2 146	248 3 151	242 3 157	236 3 164	229 3 171	222 4 178	215 4 185	1.0
29.5	267-1 131	265-1 133	262-2 136	259 2 140	255 2 144	250 3 150	245 3 155	239 3 161	+0.5
30.0	268+1 130	269 0 130	269 0 130	268-1 131	266-1 132	264-1 135	261-2 139	257 2 143	0.0
30.5	260+2 138	264+2 135	267+1 132	268+1 131	270 0 129	270 0 129	269 0 130	268-1 131	-0.5
Arg.	116 v 58	114 v 56	112 v 54	110 v 52	108 v 50	106 v 48	104 v 46	102 v 44	Arg.

TABLE 36 (concl.).

Vert. Arg. D.

Hor. Arg. 3.

Arg.	16 v 74	18 v 76	20 v 78	22 v 80	24 v 82	26 v 84	28 v 86	Arg.
-0.5	213-4 188	206-4 195	198-4 203	191-4 210	183-4 218	176-4 225	169-3 232	30.5
0.0	237 3 163	231 3 170	224 4 177	217 4 185	209 4 192	202 4 200	194 4 207	30.0
+0.5	256 2 144	251 3 149	240 3 155	240 3 161	234 3 167	227 3 174	220 4 181	29.5
1.0	268-1 132	265-1 134	262-2 138	258 2 142	254 2 147	249 3 152	243 3 158	29.0
1.5	270 0 130	270 0 129	270 0 130	269-1 131	266-1 134	264-2 137	260 2 141	28.5
2.0	262+2 137	265+1 134	267+1 132	269 0 131	269 0 130	269 0 131	268-1 132	28.0
2.5	246 3 153	251 2 148	255 2 144	259+2 140	262+1 137	265+1 135	266+1 134	27.5
3.0	223 3 177	229 3 170	235 3 164	241 3 159	246 2 153	251 2 149	255 2 145	27.0
3.5	195 3 205	202 3 198	209 3 191	216 3 184	222 3 177	229 3 171	235 3 165	26.5
4.0	166 3 234	172 3 228	179 4 220	186 4 213	194 4 206	201 4 198	208 4 191	26.0
4.5	138 3 263	143 3 257	149 3 251	156 3 244	163 4 237	170 4 229	178 4 221	25.5
5.0	113+1 288	117 2 284	121 2 279	126 3 274	132 3 268	139 4 261	147 4 253	25.0
5.5	94 0 307	95+1 306	97+1 304	101 2 300	106 3 295	111 3 289	118 4 282	24.5
6.0	81-1 320	80 0 321	80 0 322	81+1 320	84 2 318	87 2 314	93 3 308	24.0
6.5	76 3 325	72-2 329	69-1 332	68 0 334	68+1 333	70+1 331	73 2 328	23.5
7.0	79 4 322	72 3 329	66 2 335	62-2 339	60-1 341	60 0 342	60+1 341	23.0
7.5	88 5 312	79 4 322	71 4 330	65 3 336	60 2 341	57-1 344	56 0 346	22.5
8.0	104 6 296	93 5 307	84 5 317	75 4 326	68 3 332	63 2 338	60-2 342	22.0
8.5	125 6 274	113 6 286						

TABLE 37.

Vert. Arg. D.

Hor. Arg. 4.

Arg.	0 v 62	4 v 66	8 v 70	12 v 74	16 v 78	20 v 82	24 v 86	28 v 90	32 v	Arg.
-0.5	42+1 18	46+1 14	50+1 10	52+1 8	54 0 6	55 0 5	55 0 5	54 0 6	52-1	30.5
0.0	47 1 13	51+1 9	53+1 7	55 0 5	56 0 4	55 0 5	54 0 6	51-1 9	48 1	30.0
+0.5	51+1 9	54 0 6	55 0 5	55 0 5	55 0 5	53-1 7	50-1 10	47 1 13	43 1	29.5
1.0	54 0 6	55 0 5	55 0 5	54 0 6	52-1 8	49 1 11	45 1 15	41 1 19	36 1	29.0
1.5	54 0 6	54 0 6	53 0 7	50-1 10	48 1 12	44 1 16	40 1 20	35 1 25	30 1	28.5
2.0	52 0 8	51 0 9	49-1 11	46 1 14	42 1 18	38 1 22	34 1 26	29 1 31	25 1	28.0
2.5	49 0 11	47-1 13	44 1 16	41 1 19	37 1 23	33 1 27	29 1 31	24 1 36	21 1	27.5
3.0	44-1 16	42 1 18	39 1 21	35 1 25	32 1 28	28 1 32	24 1 36	21 1 39	18-1	27.0
3.5	39 1 21	37 1 23	34 1 26	31 1 29	28 1 32	25-1 35	22-1 38	19-1 41	17 0	26.5
4.0	35-1 25	32-1 28	30-1 30	27-1 33	25-1 35	23 0 37	21 0 39	19 0 41	18 0	26.0
4.5	31 0 29	29 0 31	27 0 33	25 0 35	23 0 37	22 0 38	21 0 39	20 0 40	20 0	25.5
5.0	28 0 32	26 0 34	25 0 35	24 0 36	23 0 37	22 0 38	22 0 38	22 0 38	22 0	25.0
5.5	26 0 34	25 0 35	24 0 36	23 0 37	23 0 37	23 0 37	23 0 37	24 0 36	25 0	24.5
6.0	25 0 35	24 0 36	23 0 37	23 0 37	23 0 37	24 0 36	25 0 35	26 0 34	26 0	24.0
6.5	24 0 36	24 0 36	24 0 36	24 0 36	24 0 36	25 0 35	26 0 34	27 0 33	28 0	23.5
7.0	24 0 36	24 0 36	24 0 36	24 0 36	25 0 35	25 0 35	26 0 34	27 0 33	29 0	23.0
7.5	24 0 36	24 0 36	24 0 36	24 0 36	25 0 35	26 0 34	26 0 34	28 0 32	29 0	22.5
8.0	25 0 35	24 0 36	24 0 36	25 0 35	25 0 35	26 0 34	26 0 34	27 0 33	28 0	22.0
8.5	24 0 36	24 0 36	24 0 36	25 0 35	25 0 35	26 0 34	27 0 33	28 0 32	29 0	21.5
9.0	24 0 36	24 0 36	24 0 36	25 0 35	26 0 34	27 0 33	28 0 32	30 0 30	31 0	21.0
9.5	24 0 36	24 0 36	24 0 36	25 0 35	26 0 34	27 0 33	30 0 30	32 0 28	34 0	20.5
10.0	23 0 37	24 0 36	25 0 35	26 0 34	28 0 32	29 0 31	31 0 29	35 0 25	36 0	20.0
10.5	24 0 36	25 0 35	27 0 33	28 0 32	30 0 30	32 0 28	34 0 26	38 0 22	40 0	19.5
11.0	25 0 35	27+1 33	30+1 30	32+1 28	34 0 26	36 0 24	37 0 23	39 0 21	40 0	19.0
11.5	28+1 32	31 1 29	33 1 27	36 1 24	38+1 22	40 0 20	42 0 18	43 0 17	44 0	18.5
12.0	32 1 28	35 1 25	38 1 22	41 1 19	43 0 17	45 0 15	46 0 14	46 0 14	46 0	18.0
12.5	36 1 24	40 1 20	43 1 17	46+1 14	47 0 13	48 0 12	49 0 11	49 0 11	48 0	17.5
13.0	42 1 18	45 1 15	48+1 12	50 0 10	51 0 9	51 0 9	51 0 9	49 0 11	47-1	17.0
13.5	47 1 13	50+1 10	52 0 8	53 0 7	53 0 7	52 0 8	50-1 10	48-1 12	45 1	16.5
14.0	51+1 9	53 0 7	54 0 6	54 0 6	53 0 7	51-1 9	48 1 12	45 1 15	41 1	16.0
14.5	54 0 6	55 0 5	55 0 5	53 0 7	51-1 9	48 1 12	44 1 16	40 1 20	35 1	15.5
15.0	55 0 5	55 0 5	53 0 7	51-1 9	47 1 13	43 1 17	39 1 21	34 1 26	29 1	15.0
15.5	54 0 6	52-1 8	50-1 10	46 1 14	42 1 18	37 1 23	32 1 28	27 1 33	22 1	14.5
16.0	51-1 9	48 1 12	45 1 15	40 1 20	36 1 24	31 1 29	26 1 34	21 1 39	17 1	14.0
16.5	47 1 13	43 1 17	39 1 21	35 1 25	30 1 30	26 1 34	21 1 39	17 1 43	13 1	13.5
17.0	42 1 18	38 1 22	34 1 26	29 1 31	25 1 35	21 1 39	17 1 43	14-1 46	12-1	13.0
17.5	36 1 24	33 1 27	29 1 31	25 1 35	22 1 38	18 1 42	16-1 44	13 0 47	12 0	12.5
18.0	32 1 28	28 1 32	25 1 35	22-1 38	20-1 40	17-1 43	15 0 45	14 0 46	14 0	12.0
18.5	28-1 32	25-1 35	23-1 37	21 0 39	19 0 41	18 0 42	17 0 43	16 0 44	17 0	11.5
19.0	25 0 35	24 0 36	22 0 38	21 0 39	20 0 40	20 0 40	20 0 40	20 0 40	21 0	11.0
19.5	24 0 36	23 0 37	22 0 38	22 0 38	21 0 39	21 0 39	22 0 38	23 0 37	24 0	10.5
20.0	23 0 37	23 0 37	23 0 37	23 0 37	23 0 37	24 0 36	25 0 35	26 0 34	27 0	10.0
20.5	24 0 36	23 0 37	24 0 36	24 0 36	25 0 35	26 0 34	27 0 33	28 0 32	30 0	9.5
21.0	24 0 36	24 0 36	25 0 35	25 0 35	26 0 34	27 0 33	29 0 31	30 0 30	31 0	9.0
21.5	24 0 36	25 0 35	26 0 34	26 0 34	27 0 33	28 0 32	30 0 30	31 0 29	32 0	8.5
22.0	25 0 35	25 0 35	26 0 34	27 0 33	28 0 32	29 0 31	30 0 30	31 0 29	32 0	8.0
22.5	24 0 36	25 0 35	26 0 34	26 0 34	27 0 33	28 0 32	30 0 30	31 0 29	32 0	7.5
23.0	24 0 36	25 0 35	26 0 34	27 0 33	28 0 32	29 0 31	30 0 30	31 0 29	32 0	7.0
23.5	24 0 36	25 0 35	26 0 34	27 0 33	28 0 32	29 0 31	30 0 30	32 0 28	33 0	6.5
24.0	25 0 35	26 0 34	27 0 33	28 0 32	29 0 31	30 0 30	32 0 28	33 0 27	34 0	6.0
24.5	26 0 34	27 0 33	28 0 32	30 0 30	31 0 29	32 0 28	34 0 26	35 0 25	36 0	5.5
25.0	28 0 32	29 0 31	31 0 29	32 0 28	34 0 26	35 0 25	36 0 24	37 0 23	38 0	5.0
25.5	31 0 29	33 0 27	34 0 26	36 0 24	38 0 22	39 0 21	39 0 21	40 0 20	40 0	4.5
26.0	35+1 25	37+1 23	39 0 21	40 0 20	42 0 18	42 0 18	42 0 18	42 0 18	41 0	4.0
26.5	39 1 21	41+1 19	43 0 17	45 0 15	45 0 15	45 0 15	44 0 16	43 0 17	42 0	3.5
27.0	44+1 16	46 0 14	47 0 13	48 0 12	48 0 12	47 0 13	45 0 15	43-1 17	40-1	3.0
27.5	49 0 11	50 0 10	51 0 9	50 0 10	49 0 11	47-1 13	44-1 16	41 1 19	37 1	2.5
28.0	52 0 8	52 0 8	52 0 8	50 0 10	48-1 12	45 1 15	42 1 18	38 1 22	33 1	2.0
28.5	54 0 6	53 0 7	51-1 9	49-1 11	45 1 15	41 1 19	37 1 23	32 1 28	27 1	1.5
29.0	54 0 6	52-1 8	49 1 11	45 1 15	41 1 19	36 1 24	31 1 29	26 1 34	21 1	1.0
29.5	51-1 9	48 1 12	44 1 16	40 1 20	35 1 25	30 1 30	24 1 36	20 1 40	15 1	+0.5
30.0	47 1 13	43 1 17	38 1 22	33 1 27	28 1 32	23 1 37	18 1 42	14 1 46	10 1	0.0
30.5	42-1 18	37-1 23	32-1 28	27-1 33	22-1 38	17-1 43	13-1 47	10-1 50	7-1	-0.5
Arg.	124 v 62	120 v 58	116 v 54	112 v 50	108 v 46	104 v 42	100 v 38	96 v 34	92 v	Arg.

TABLE 38.

Vert. Arg. D.

Hor. Arg. 5.

Arg.	0 v 64	4 v 68	8 v 72	12 v 76	16 v 80	20 v 84	24 v 88	28 v 92	32 v	Arg.
-0.5	14-1 46	12 0 48	10 0 50	9 0 51	9 0 51	10 0 50	11 0 49	14+1 46	16+1	30.5
0.0	10 0 50	9 0 51	9 0 51	9 0 51	11 0 49	13+1 47	16+1 44	19 1 41	22 1	30.0
+0.5	9 0 51	9 0 51	10 0 50	12+1 48	15+1 45	18 1 42	22 1 38	26 1 34	30 1	29.5
1.0	10 0 50	12+1 48	14+1 46	17 1 43	21 1 39	25 1 35	29 1 31	33 1 27	37 1	29.0
1.5	14+1 46	17 1 43	20 1 40	24 1 36	28 1 32	32 1 28	36 1 24	40 1 20	43+1	28.5
2.0	20 1 40	24 1 36	27 1 33	31 1 29	35 1 25	38 1 22	41+1 19	44+1 16	46 0	28.0
2.5	27 1 33	30 1 30	34 1 26	37 1 23	40+1 20	43+1 17	45 0 15	46 0 14	47 0	27.5
3.0	33 1 27	36+1 24	39+1 21	41+1 19	43 0 17	45 0 15	46 0 14	46 0 14	46 0	27.0
3.5	38+1 22	40 0 20	42 0 18	43 0 17	44 0 16	44 0 16	44 0 16	43 0 17	42 0	26.5
4.0	40 0 20	42 0 18	42 0 18	43 0 17	42 0 18	42 0 18	41 0 19	39 0 21	38 0	26.0
4.5	41 0 19	41 0 19	41 0 19	41 0 19	40 0 20	38 0 22	37 0 23	35 0 25	33-1	25.5
5.0	40 0 20	39 0 21	39 0 21	38 0 22	36 0 24	34 0 26	33 0 27	31 0 29	29 0	25.0
5.5	37 0 23	36 0 24	35 0 25	34 0 26	32 0 28	31 0 29	29 0 31	27 0 33	26 0	24.5
6.0	35 0 25	34 0 26	32 0 28	31 0 29	30 0 30	28 0 32	27 0 33	26 0 34	25 0	24.0
6.5	32 0 28	31 0 29	30 0 30	29 0 31	28 0 32	27 0 33	26 0 34	26 0 34	25 0	23.5
7.0	30 0 30	29 0 31	28 0 32	28 0 32	27 0 33	27 0 33	27 0 33	27 0 33	27 0	23.0
7.5	28 0 32	28 0 32	28 0 32	28 0 32	28 0 32	28 0 32	29 0 31	29 0 31	29 0	22.5
8.0	28 0 32	29 0 31	29 0 31	30 0 30	30 0 30	31 0 29	31 0 29	32 0 28	32 0	22.0
8.5	30 0 30	30 0 30	31 0 29	32 0 28	33 0 27	33 0 27	34 0 26	34 0 26	34 0	21.5
9.0	32 0 28	33 0 27	34 0 26	35 0 25	36 0 24	36 0 24	36			

TABLE 40.

TABLE 40 (concl.).

TABLE 41.

TABLE 42.

TABLE 39. Vert. Arg. D. Hor. Arg. 6.

Vert. Arg. D. Hor. Arg. 7.

Vert. Arg. D. Hor. Arg. 7.

Vert. Arg. D. Hor. Arg. 8.

Vert. Arg. D. Hor. Arg. 9.

Arg.	0 66	4 70	8 74	12 78	16 82	20 86	24 90	28 94	32 98	Arg.
-0.5	6 14	5 15	5 15	4 16	4 16	4 16	4 16	5 15	6 14	30.5
0.0	6 14	5 15	5 15	4 16	4 16	4 16	5 15	5 15	6 14	30.0
+0.5	6 14	5 15	4 16	4 16	4 16	4 16	5 15	5 15	6 14	29.5
1.0	6 14	5 15	4 16	4 16	4 16	4 16	5 15	5 15	6 14	29.0
1.5	5 15	5 15	4 16	4 16	4 16	4 16	5 15	6 14	6 14	28.5
2.0	5 15	5 15	4 16	4 16	4 16	4 16	5 15	6 14	6 14	28.0
2.5	6 14	5 15	4 16	4 16	4 16	4 16	5 15	5 15	6 14	27.5
3.0	6 14	5 15	5 15	4 16	4 16	4 16	5 15	5 15	6 14	27.0
3.5	6 14	6 14	5 15	4 16	4 16	4 16	4 16	5 15	6 14	26.5
4.0	7 13	6 14	5 15	5 15	4 16	4 16	4 16	4 16	5 15	26.0
4.5	8 12	6 14	6 14	5 15	4 16	4 16	4 16	4 16	4 16	25.5
5.0	8 12	7 13	6 14	5 15	4 16	4 16	4 16	4 16	4 16	25.0
5.5	9 11	7 13	7 13	6 14	5 15	4 16	4 16	3 17	3 17	24.5
6.0	10 10	9 11	7 13	6 14	5 15	4 16	3 17	3 17	2 18	24.0
6.5	11 9	10 10	8 12	7 13	6 14	4 16	3 17	3 17	2 18	23.5
7.0	12 8	11 9	9 11	7 13	6 14	5 15	4 16	3 17	2 18	23.0
7.5	13 7	11 9	10 10	8 12	7 13	5 15	4 16	3 17	2 18	22.5
8.0	14 6	12 8	10 10	9 11	7 13	6 14	5 15	4 16	3 17	22.0
8.5	14 6	13 7	11 9	10 10	8 12	7 13	5 15	4 16	3 17	21.5
9.0	15 5	13 7	12 8	11 9	9 11	8 12	6 14	5 15	4 16	21.0
9.5	15 5	14 6	13 7	12 8	10 10	9 11	7 13	6 14	5 15	20.5
10.0	15 5	14 6	13 7	12 8	11 9	10 10	8 12	7 13	6 14	20.0
10.5	16 4	15 5	14 6	13 7	12 8	11 9	10 10	8 12	7 13	19.5
11.0	16 4	15 5	15 5	14 6	13 7	12 8	11 9	9 11	8 12	19.0
11.5	16 4	15 5	15 5	14 6	13 7	12 8	11 9	10 10	9 11	18.5
12.0	16 4	16 4	15 5	15 5	14 6	13 7	12 8	11 9	10 10	18.0
12.5	16 4	16 4	15 5	15 5	14 6	13 7	12 8	11 9	10 10	17.5
13.0	16 4	16 4	16 4	15 5	15 5	14 6	13 7	12 8	11 9	17.0
13.5	16 4	16 4	16 4	15 5	15 5	14 6	13 7	12 8	11 9	16.5
14.0	16 4	16 4	16 4	15 5	14 6	13 7	12 8	11 9	10 10	16.0
14.5	16 4	16 4	16 4	15 5	15 5	14 6	13 7	12 8	11 9	15.5
15.0	16 4	16 4	15 5	15 5	14 6	13 7	12 8	11 9	10 10	15.0
15.5	16 4	16 4	15 5	15 5	14 6	13 7	12 8	11 9	10 10	14.5
16.0	16 4	16 4	15 5	15 5	14 6	13 7	12 8	11 9	10 10	14.0
16.5	16 4	16 4	15 5	14 6	13 7	12 8	11 9	10 10	10 10	13.5
17.0	16 4	16 4	15 5	15 5	14 6	13 7	12 8	11 9	10 10	13.0
17.5	16 4	16 4	15 5	15 5	14 6	13 7	12 8	11 9	10 10	12.5
18.0	16 4	16 4	16 4	15 5	14 6	13 7	12 8	11 9	10 10	12.0
18.5	16 4	16 4	16 4	15 5	15 5	14 6	13 7	12 8	11 9	11.5
19.0	16 4	16 4	16 4	16 4	15 5	14 6	13 7	12 8	11 9	11.0
19.5	16 4	16 4	16 4	16 4	16 4	15 5	14 6	13 7	10 10	10.5
20.0	15 5	16 4	16 4	17 3	17 3	16 4	16 4	15 5	14 6	10.0
20.5	15 5	16 4	17 3	17 3	17 3	17 3	16 4	15 5	14 6	9.5
21.0	15 5	16 4	17 3	17 3	18 2	18 2	17 3	16 4	15 5	9.0
21.5	14 6	15 5	16 4	17 3	18 2	18 2	18 2	17 3	16 4	8.5
22.0	14 6	15 5	16 4	17 3	18 2	18 2	18 2	18 2	18 2	8.0
22.5	13 7	14 6	16 4	17 3	18 2	18 2	18 2	18 2	18 2	7.5
23.0	12 8	14 6	15 5	16 4	17 3	18 2	18 2	18 2	18 2	7.0
23.5	11 9	13 7	14 6	15 5	16 4	17 3	18 2	18 2	18 2	6.5
24.0	10 10	12 8	13 7	14 6	15 5	16 4	17 3	18 2	18 2	6.0
24.5	9 11	11 9	12 8	13 7	14 6	15 5	16 4	17 3	17 3	5.5
25.0	8 12	10 10	11 9	12 8	13 7	14 6	15 5	16 4	16 4	5.0
25.5	8 12	9 11	10 10	11 9	12 8	13 7	14 6	15 5	16 4	4.5
26.0	7 13	8 12	9 11	10 10	11 9	12 8	13 7	14 6	15 5	4.0
26.5	6 14	7 13	8 12	9 11	10 10	11 9	12 8	13 7	14 6	3.5
27.0	6 14	6 14	7 13	8 12	9 11	10 10	11 9	12 8	13 7	3.0
27.5	6 14	6 14	7 13	8 12	9 11	10 10	11 9	12 8	13 7	2.5
28.0	5 15	6 14	7 13	8 12	9 11	10 10	11 9	12 8	13 7	2.0
28.5	5 15	6 14	7 13	8 12	9 11	10 10	11 9	12 8	13 7	1.5
29.0	5 15	6 14	7 13	8 12	9 11	10 10	11 9	12 8	13 7	1.0
29.5	6 14	6 14	7 13	8 12	9 11	10 10	12 8	13 7	14 6	+0.5
30.0	6 14	7 13	8 12	9 11	10 10	11 9	12 8	13 7	14 6	0.0
30.5	6 14	7 13	8 12	9 11	10 10	11 9	12 8	13 7	14 6	-0.5

Arg.	0 50	4 54	8 58	12 62	Arg.
-0.5	15 5	14 6	14 6	13 7	30.5
0.0	15 5	15 5	15 5	14 6	30.0
+0.5	15 5	15 5	15 5	15 5	29.5
1.0	14 6	14 6	15 5	15 5	29.0
1.5	12 8	13 7	14 6	15 5	28.5
2.0	10 10	12 8	13 7	14 6	28.0
2.5	9 11	10 10	11 9	12 8	27.5
3.0	7 13	8 12	9 11	11 9	27.0
3.5	6 14	6 14	8 12	9 11	26.5
4.0	5 15	5 15	6 14	7 13	26.0
4.5	4 16	4 16	5 15	6 14	25.5
5.0	5 15	4 16	4 16	4 16	25.0
5.5	6 14	4 16	4 16	4 16	24.5
6.0	7 13	5 15	4 16	3 17	24.0
6.5	8 12	6 14	5 15	4 16	23.5
7.0	9 11	7 13	6 14	4 16	23.0
7.5	11 9	9 11	7 13	5 15	22.5
8.0	12 8	10 10	8 12	6 14	22.0
8.5	14 6	12 8	10 10	8 12	21.5
9.0	15 5	13 7	11 9	10 10	21.0
9.5	15 5	14 6	13 7	11 9	20.5
10.0	16 4	15 5	14 6	13 7	20.0
10.5	16 4	15 5	15 5	14 6	19.5
11.0	15 5	15 5	15 5	15 5	19.0
11.5	14 6	15 5	15 5	15 5	18.5
12.0	13 7	14 6	15 5	15 5	18.0
12.5	11 9	12 8	13 7	14 6	17.5
13.0	9 11	10 10	12 8	13 7	17.0
13.5	7 13	9 11	10 10	11 9	16.5
14.0	6 14	7 13	8 12	9 11	16.0
14.5	5 15	6 14	7 13	8 12	15.5
15.0	5 15	5 15	5 15	6 14	15.0
15.5	5 15	5 15	5 15	5 15	14.5
16.0	6 14	5 15	5 15	5 15	14.0
16.5	7 13	6 14	5 15	5 15	13.5
17.0	9 11	8 12	7 13	6 14	13.0
17.5	11 9	10 10	8 12	7 13	12.5
18.0	13 7	12 8	10 10	9 11	12.0
18.5	14 6	13 7	12 8	11 9	11.5
19.0	15 5	14 6	14 6	12 8	11.0
19.5	16 4	15 5	15 5	14 6	10.5
20.0	16 4	16 4	16 4	16 4	10.0
20.5	15 5	16 4	16 4	17 3	9.5
21.0	15 5	16 4	17 3	17 3	9.0
21.5	14 6	15 5	16 4	17 3	8.5
22.0	12 8	14 6	15 5	17 3	8.0
22.5	11 9	13 7	14 6	16 4	7.5
23.0	9 11	11 9	13 7	15 5	7.0
23.5	8 12	10 10	12 8	13 7	6.5
24.0	7 13	8 12	10 10	12 8	6.0
24.5	6 14	7 13	8 12	10 10	5.5
25.0	5 15	6 14	7 13	8 12	5.0
25.5	4 16	5 15	6 14	6 14	4.5
26.0	5 15	5 15	5 15	6 14	4.0
26.5	6 14	5 15	5 15	5 15	3.5
27.0	7 13	6 14	5 15	5 15	3.0
27.5	9 11	7 13	6 14	6 14	2.5
28.0	10 10	9 11	8 12	6 14	2.0
28.5	12 8	11 9	9 11	8 12	1.5
29.0	14 6	12 8	11 9	10 10	1.0
29.5	15 5	14 6	13 7	12 8	+0.5
30.0	15 5	15 5	14 6	13 7	0.0
30.5	15 5	15 5	15 5	14 6	-0.5

Arg.	16 66	20 70	24 74	Arg.
-0.5	12 8	10 10	9 11	30.5
0.0	13 7	12 8	11 9	30.0
+0.5	15 5	14 6	13 7	29.5
1.0	15 5	15 5	14 6	29.0
1.5	15 5	15 5	15 5	28.5
2.0	14 6	15 5	15 5	28.0
2.5	13 7	14 6	15 5	27.5
3.0	12 8	13 7	14 6	27.0
3.5	10 10	11 9	12 8	26.5
4.0	8 12	10 10	11 9	26.0
4.5	6 14	8 12	9 11	25.5
5.0	5 15	6 14	7 13	25.0
5.5	4 16	4 16	5 15	24.5
6.0	3 17	3 17	4 16	24.0
6.5	3 17	3 17	3 17	23.5
7.0	3 17	2 18	2 18	23.0
7.5	4 16	3 17	2 18	22.5
8.0	5 15	4 16	3 17	22.0
8.5	6 14	5 15	4 16	21.5
9.0	8 12	6 14	5 15	21.0
9.5	9 11	8 12	6 14	20.5
10.0	11 9	10 10	8 12	20.0
10.5	13 7	12 8	10 10	19.5
11.0	14 6	13 7	12 8	19.0
11.5	15 5	14 6	14 6	18.5
12.0	15 5			

TABLE 43.

Vert. Arg. D.

Hor. Arg. 16.

Arg.	0 v	2 v	4 v	6 v	8 v	10 v	12 v	14 v	16 v	18 v	20 v	Arg.
-0.5	1068 + 12	1090 + 10	1108 + 8	1123 + 6	1134 + 4	1141 + 2	1144 0	1142 - 2	1137 - 4	1127 - 6	1113 - 8	30.5
0.0	1101 10	1119 8	1134 6	1144 4	1151 + 2	1154 0	1152 - 2	1145 4	1135 6	1121 8	1102 10	30.0
+0.5	1122 8	1135 6	1146 4	1152 + 2	1153 0	1150 - 2	1144 4	1133 6	1118 8	1099 10	1077 12	29.5
1.0	1127 6	1136 4	1142 + 2	1143 0	1140 - 3	1133 5	1121 7	1106 8	1088 10	1066 12	1041 13	29.0
1.5	1118 4	1123 + 1	1124 - 1	1121 - 3	1114 5	1103 6	1088 8	1070 10	1049 11	1025 13	999 14	28.5
2.0	1097 + 2	1098 0	1095 2	1089 4	1079 6	1065 8	1048 9	1029 10	1007 12	983 13	956 14	28.0
2.5	1068 0	1066 - 2	1061 3	1053 5	1042 7	1027 8	1010 9	990 10	969 11	946 12	921 13	27.5
3.0	1037 - 1	1034 2	1028 4	1019 5	1008 6	994 8	978 9	960 9	940 10	918 11	896 11	27.0
3.5	1007 - 1	1004 2	999 3	991 4	981 6	969 6	955 7	939 8	922 9	904 9	885 10	26.5
4.0	983 0	981 - 1	977 2	971 3	964 4	954 5	943 6	931 7	917 7	902 8	886 8	26.0
4.5	964 + 1	965 0	964 - 1	960 - 2	956 3	949 4	942 4	932 5	922 5	910 6	898 7	25.5
5.0	953 2	956 + 1	957 0	957 0	955 - 1	952 2	947 3	941 3	934 4	925 5	914 6	25.0
5.5	945 3	951 3	955 + 2	958 + 1	959 0	959 - 1	957 2	953 2	947 3	940 4	931 5	24.5
6.0	938 5	947 4	954 3	959 2	963 + 1	964 0	964 - 1	962 2	957 3	950 4	941 5	24.0
6.5	932 6	943 5	952 4	959 3	962 2	967 + 1	968 0	966 2	962 3	955 4	945 6	23.5
7.0	923 7	936 6	947 5	956 4	962 2	966 1	966 0	964 2	959 3	951 5	940 6	23.0
7.5	915 8	929 7	941 5	950 4	957 3	960 + 1	961 - 1	958 2	951 4	942 6	928 8	22.5
8.0	908 8	923 7	936 6	945 4	951 2	954 0	953 1	949 3	940 5	928 7	912 9	22.0
8.5	906 9	922 7	935 5	944 4	949 2	950 0	948 2	942 4	931 6	916 8	907 10	21.5
9.0	913 9	929 7	941 5	949 3	953 + 1	952 - 1	948 3	939 6	925 8	908 10	886 12	21.0
9.5	931 8	946 6	956 4	962 2	964 0	961 3	954 5	942 7	925 9	904 11	880 13	20.5
10.0	958 7	971 5	979 3	983 + 1	982 - 2	976 4	965 6	950 9	930 11	906 13	879 15	20.0
10.5	992 6	1002 4	1007 + 1	1007 - 1	1003 4	993 6	979 8	960 10	937 12	910 14	880 16	19.5
11.0	1026 4	1032 + 2	1033 - 1	1030 3	1021 6	1008 8	990 10	968 12	942 14	913 15	881 17	19.0
11.5	1053 + 2	1055 0	1051 3	1043 5	1031 7	1014 9	993 11	968 13	941 14	910 16	878 17	18.5
12.0	1066 0	1063 - 3	1055 5	1043 7	1027 9	1008 11	985 12	959 14	931 15	900 16	868 16	18.0
12.5	1061 - 2	1054 4	1043 6	1028 8	1011 10	990 11	966 12	941 13	914 14	885 15	856 15	17.5
13.0	1039 4	1029 5	1017 7	1001 8	983 10	963 10	941 11	918 12	894 12	868 13	842 13	17.0
13.5	1006 4	996 6	984 7	970 8	954 8	936 9	917 10	897 10	877 10	856 11	834 11	16.5
14.0	971 4	963 5	953 5	942 6	929 7	915 7	900 8	885 8	869 8	852 8	835 9	16.0
14.5	945 - 2	940 3	934 3	927 4	919 4	909 5	899 5	888 6	876 6	863 7	849 7	15.5
15.0	935 0	935 - 1	933 - 1	930 - 2	926 2	920 3	914 4	905 5	896 5	884 6	872 7	15.0
15.5	945 + 2	949 + 1	950 + 1	951 0	950 1	946 2	941 3	934 4	924 5	913 6	899 8	14.5
16.0	971 4	977 3	981 2	983 0	983 1	980 2	974 4	965 5	953 7	939 8	921 9	14.0
16.5	1006 4	1013 3	1017 + 1	1018 0	1016 2	1011 4	1002 5	990 7	974 9	955 10	932 12	13.5
17.0	1039 4	1045 + 2	1047 0	1040 - 2	1040 4	1030 6	1016 8	999 10	978 12	952 13	924 15	13.0
17.5	1061 + 2	1063 0	1062 - 2	1056 4	1045 6	1030 8	1011 11	988 13	961 14	930 16	896 18	12.5
18.0	1066 0	1064 - 2	1057 4	1046 7	1031 9	1010 11	986 13	957 15	925 17	890 18	852 20	12.0
18.5	1053 - 2	1046 4	1035 7	1019 9	998 11	973 13	944 15	912 17	876 18	838 20	798 21	11.5
19.0	1026 4	1015 7	999 9	979 11	954 13	926 15	894 17	860 18	822 19	782 20	742 21	11.0
19.5	992 6	977 8	958 10	935 12	908 14	878 16	845 17	809 18	772 19	733 20	693 20	10.5
20.0	958 7	941 10	920 11	896 13	868 15	837 16	804 17	769 18	733 18	696 19	658 19	10.0
20.5	931 8	912 10	890 12	866 13	838 14	808 15	776 16	743 17	709 17	674 17	639 17	9.5
21.0	913 9	895 10	873 12	848 13	822 14	793 15	763 16	732 16	701 16	669 16	637 16	9.0
21.5	906 9	888 10	867 11	844 12	819 13	792 14	765 14	736 14	707 15	678 14	649 14	8.5
22.0	908 8	890 9	870 10	849 11	826 12	801 12	776 13	750 13	724 13	697 13	671 13	8.0
22.5	915 8	899 9	880 10	860 10	839 11	817 11	794 12	771 12	746 12	722 12	698 12	7.5
23.0	923 7	909 8	892 8	875 9	856 10	836 10	815 11	794 11	772 11	750 11	727 11	7.0
23.5	932 6	919 7	905 7	890 8	873 9	855 9	837 9	818 10	798 10	777 10	756 11	6.5
24.0	938 5	928 5	916 6	904 7	889 7	874 8	858 8	840 9	822 9	802 10	782 10	6.0
24.5	945 3	938 4	929 5	918 6	906 6	893 7	878 8	862 8	845 9	826 10	806 10	5.5
25.0	953 2	948 3	941 4	933 4	923 5	912 6	898 7	883 8	866 9	848 10	830 10	5.0
25.5	964 - 1	962 2	958 3	951 4	943 5	932 6	919 7	904 8	887 9	868 10	848 11	4.5
26.0	983 0	982 1	979 2	974 3	966 5	955 6	942 7	926 8	908 10	888 11	866 12	4.0
26.5	1007 + 1	1007 1	1004 2	999 3	991 5	979 6	965 8	948 9	928 11	906 12	881 13	3.5
27.0	1037 + 1	1036 1	1033 3	1026 4	1016 6	1003 7	986 9	967 10	944 12	919 13	892 14	3.0
27.5	1068 0	1066 2	1060 4	1052 5	1039 7	1023 9	1003 11	980 12	955 14	926 15	896 16	2.5
28.0	1097 - 2	1092 3	1083 5	1070 7	1054 9	1034 11	1011 12	985 14	956 15	924 16	890 17	2.0
28.5	1118 4	1109 6	1096 7	1080 9	1059 11	1036 13	1008 14	979 16	946 17	912 18	875 18	1.5
29.0	1127 6	1114 8	1096 10	1076 11	1051 13	1023 15	993 16	960 17	925 18	888 19	850 19	1.0
29.5	1122 8	1104 10	1082 12	1057 13	1029 15	998 16	965 17	930 18	893 19	856 19	817 19	+0.5
30.0	1101 10	1079 12	1054 13	1026 15	995 16	962 17	927 18	891 18	854 19	817 19	779 19	0.0
30.5	1068 - 12	1043 - 13	1015 - 14	986 - 15	954 - 16	920 - 17	885 - 18	849 - 18	813 - 18	777 - 18	742 - 18	-0.5
Arg.	251 v	249 v	247 v	245 v	243 v	241 v	239 v	237 v	235 v	233 v	231 v	Arg.

TABLE 43 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	22 v	24 v	26 v	28 v	30 v	32 v	34 v	36 v	38 v	40 v	42 v	Arg.
-0.5	1096 - 10	1074 - 11	1050 - 13	1022 - 15	991 - 16	958 - 17	923 - 18	886 - 19	848 - 19	810 - 19	771 - 19	30.5
0.0	1081 12	1055 13	1027 15	996 16	963 17	928 18	891 19	853 19	815 19	776 19	738 19	30.0
+0.5	1052 13	1024 15	993 16	960 17	925 18	889 18	852 19	814 19	777 19	740 18	704 18	29.5
1.0	1013 14	983 16	951 16	917 17	883 18	847 18	811 18	775 18	740 17	706 17	672 16	29.0
1.5	970 15	940 16	908 16	875 17	841 17	808 17	774 17	741 16	709 16	678 15	648 14	28.5
2.0	928 14	899 15	869 15	838 15	807 15	776 15	746 15	716 14	688 14	661 13	635 12	28.0
2.5	894 13	868 14	840 14	812 14	785 14	757 14	730 13	704 13	680 12	656 11	634 11	27.5
3.0	873 12	849 12	825 12	801 12	777 12	753 12	730 11	707 11	685 11	665 10	645 10	27.0
3.5	865 10	845 10	825 10	803 10	783 10	762 10	741 10	721 10	701 10	682 9	664 9	26.5
4.0	870 8	853 9	836 9	818 9	799 9	780 9	762 9	742 9	724 9	705 9	686 9	26.0
4.5	884 7	870 8	854 8	838 8	821 9	803 9	784 9	765 10	746 10	725 10	705 10</	

TABLE 43 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	88 v	90 v	92 v	94 v	96 v	98 v	100 v	102 v	104 v	106 v	108 v	Arg.
d												d
-0.5	570+13	597+14	625+14	654+15	683+14	712+14	741+14	768+13	794+13	819+12	842+11	30.5
0.0	582 12	607 12	632 12	657 12	682 12	706 12	730 12	752 11	774 10	794 9	812 9	30.0
+0.5	588 10	609 10	630 11	651 10	672 10	693 10	713 10	732 9	750 9	767 8	783 8	29.5
1.0	587 9	605 9	624 9	642 9	660 9	678 9	696 9	713 9	730 8	747 8	763 8	29.0
1.5	583 8	599 8	615 8	631 8	648 9	665 9	683 9	701 9	719 9	737 9	756 9	28.5
2.0	575 7	589 7	605 8	621 8	638 9	657 10	676 10	697 10	718 11	740 11	763 12	28.0
2.5	565 7	580 8	596 8	614 9	633 10	654 11	677 12	701 12	726 13	753 14	781 14	27.5
3.0	553 8	569 9	588 10	608 11	630 12	655 13	682 14	711 15	741 16	773 16	806 17	27.0
3.5	539 9	557 10	578 11	602 13	629 14	658 15	689 16	723 17	758 18	794 18	831 19	26.5
4.0	523 10	544 12	569 13	597 15	628 16	661 17	697 18	734 19	773 20	813 20	853 20	26.0
4.5	506 12	531 14	560 15	592 17	626 18	664 19	703 20	743 21	785 21	827 21	868 21	25.5
5.0	490 14	519 15	552 17	588 19	626 20	666 21	708 21	751 22	794 22	838 21	880 21	25.0
5.5	478 16	512 17	548 19	587 20	628 21	671 22	715 22	759 22	803 22	846 21	887 20	24.5
6.0	475 18	511 19	551 20	592 21	636 22	680 22	725 22	769 22	812 21	854 20	894 19	24.0
6.5	480 19	519 20	561 21	605 22	649 22	694 22	739 22	782 21	824 21	864 19	902 18	23.5
7.0	495 20	536 21	580 22	624 22	669 22	713 22	756 21	798 20	838 19	876 18	910 16	23.0
7.5	518 21	560 21	604 22	648 22	691 21	734 21	775 20	814 19	851 18	886 16	917 15	22.5
8.0	546 21	588 21	630 21	672 21	714 20	754 20	792 19	828 17	862 16	892 14	919 13	22.0
8.5	574 20	615 20	655 20	694 19	732 19	768 18	803 17	835 15	864 14	891 13	915 11	21.5
9.0	599 19	636 18	672 18	708 17	742 16	774 16	804 14	832 13	858 12	881 11	902 10	21.0
9.5	616 16	649 16	681 16	712 15	741 14	769 13	795 13	819 12	841 11	861 9	879 8	20.5
10.0	622 14	650 14	677 13	703 13	728 12	752 12	774 11	795 10	814 9	832 8	848 8	20.0
10.5	617 12	640 11	663 11	685 11	706 10	726 10	744 10	765 9	782 9	799 8	814 8	19.5
11.0	601 10	621 10	640 9	659 10	677 9	696 9	714 9	731 9	748 9	765 8	781 8	19.0
11.5	580 8	596 8	613 8	630 9	647 9	665 9	683 9	701 9	719 9	738 9	756 9	18.5
12.0	556 7	571 8	587 8	604 9	622 9	641 9	660 10	680 10	701 10	722 10	742 10	18.0
12.5	536 7	551 8	568 9	586 10	606 10	627 11	649 11	672 12	696 12	720 12	744 12	17.5
13.0	523 8	541 9	560 10	581 11	604 12	628 12	653 13	679 13	706 14	734 14	761 14	17.0
13.5	521 10	541 11	564 12	588 13	615 14	643 14	671 15	701 15	732 15	762 15	792 15	16.5
14.0	528 12	552 13	579 14	607 14	637 16	668 16	700 16	733 16	766 16	799 16	831 16	16.0
14.5	545 14	573 15	603 16	635 16	668 17	702 17	737 17	772 17	806 17	839 17	872 16	15.5
15.0	566 15	598 16	632 17	667 18	702 18	738 18	774 18	810 17	844 17	877 16	909 15	15.0
15.5	590 17	625 18	661 18	698 18	734 18	771 18	807 18	842 17	875 16	907 15	930 14	14.5
16.0	613 18	649 18	687 19	724 18	761 18	797 18	832 17	865 16	896 15	925 14	951 12	14.0
16.5	631 18	668 19	706 19	742 18	779 18	813 17	846 16	877 15	905 13	931 12	953 10	13.5
17.0	644 19	681 18	718 18	753 17	787 17	820 16	850 15	878 14	903 12	925 10	944 9	13.0
17.5	653 18	688 18	723 17	757 16	789 15	818 14	846 13	871 12	893 10	912 9	928 7	12.5
18.0	657 17	691 17	723 16	755 15	784 14	812 13	836 12	859 10	878 9	895 8	909 6	12.0
18.5	660 16	692 16	722 15	751 14	778 13	803 12	826 11	846 9	864 8	879 7	891 5	11.5
19.0	660 15	690 15	719 14	745 13	770 12	794 11	815 10	834 9	851 8	865 7	877 5	11.0
19.5	662 14	689 14	716 13	741 12	765 11	787 11	807 10	826 9	842 8	857 7	869 6	10.5
20.0	662 13	688 13	713 12	738 12	760 11	782 10	802 10	821 9	838 8	854 7	868 6	10.0
20.5	662 12	686 12	711 12	734 12	757 11	778 10	799 10	818 10	837 9	854 8	870 7	9.5
21.0	660 12	684 12	708 12	731 12	754 11	776 11	798 11	819 10	839 10	858 9	876 8	9.0
21.5	655 12	678 12	702 12	726 12	750 12	773 12	796 11	819 11	841 11	862 10	882 10	8.5
22.0	646 12	670 12	695 12	720 12	744 12	769 12	794 12	819 12	843 12	866 12	889 11	8.0
22.5	636 12	661 13	686 13	713 13	739 13	766 14	793 14	820 13	846 13	872 13	897 12	7.5
23.0	625 13	651 13	679 14	707 14	736 15	766 15	795 15	825 15	854 14	882 14	909 13	7.0
23.5	617 14	646 15	676 15	707 16	738 16	770 16	803 16	834 16	866 15	896 15	925 14	6.5
24.0	616 15	647 16	680 17	714 17	748 17	784 18	818 17	853 17	887 16	919 16	950 15	6.0
24.5	623 17	658 18	694 18	731 19	769 19	807 19	844 18	881 18	916 17	950 16	982 15	5.5
25.0	642 19	680 19	720 20	760 20	800 20	840 20	880 19	918 19	954 18	989 16	1020 15	5.0
25.5	672 20	713 21	755 21	798 21	840 21	881 20	922 20	960 19	996 18	1030 16	1060 14	4.5
26.0	711 21	754 22	798 22	841 21	884 21	925 20	965 19	1002 18	1036 16	1068 15	1095 13	4.0
26.5	753 22	797 22	840 22	883 21	924 20	964 19	1001 18	1035 16	1066 15	1093 12	1116 10	3.5
27.0	792 21	835 21	877 20	917 20	955 18	991 17	1024 15	1053 14	1078 12	1100 10	1117 8	3.0
27.5	822 20	861 19	899 18	935 17	968 16	998 14	1026 13	1049 11	1069 9	1084 7	1096 5	2.5
28.0	837 17	871 17	904 16	934 14	961 13	985 11	1006 10	1024 8	1038 6	1048 4	1054 2	2.0
28.5	836 15	864 14	891 13	915 11	936 10	955 8	970 7	982 5	992 4	998 2	1001 + 1	1.5
29.0	820 12	844 11	864 10	883 9	900 7	914 6	925 5	934 4	940 3	944 1	946 0	1.0
29.5	796 10	814 9	831 8	847 7	860 6	872 5	881 4	889 3	896 3	900 2	904 + 1	+0.5
30.0	769 8	786 8	801 7	815 7	828 6	840 5	850 5	860 4	869 4	876 4	883 3	0.0
30.5	748 + 8	764 + 8	780 + 8	795 + 8	811 + 7	825 + 7	839 + 7	853 + 7	866 + 6	878 + 6	890 + 0	-0.5
Arg.	163 v	161 v	159 v	157 v	155 v	153 v	151 v	149 v	147 v	145 v	143 v	Arg.

TABLE 43 (concl.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	110 v	112 v	114 v	116 v	118 v	120 v	122 v	124 v	126 v	Arg.
d										d
-0.5	862+10	881+9	897+7	911+6	922+5	931+4	937+2	941+1	943 0	30.5
0.0	829 8	844 7	858 6	869 5	879 4	887 3	893 3	898 2	902 + 1	30.0
+0.5	798 7	813 7	826 6	838 6	848 5	858 4	867 4	876 4	883 3	29.5
1.0	779 8	795 8	810 7	825 7	839 7	853 7	866 6	879 6	891 6	29.0
1.5	775 10	794 10	814 10	833 10	852 10	871 9	889 9	907 9	924 8	28.5
2.0	786 12	810 12	835 12	859 12	884 12	908 12	931 11	953 11	974 10	28.0
2.5	810 14	839 15	868 15	898 15	926 14	955 14	982 13	1007 12	1030 11	27.5
3.0	839 17	873 17	906 17	940 16	972 16	1002 15	1031 14	1057 12	1081 11	27.0
3.5	868 19	905 18	942 18	977 17	1010 16	1042 15	1070 14	1096 12	1117 10	26.5
4.0	892 20	932 19	969 18	1005 17	1038 16	1068 14	1095 12	1118 10	1136 8	26.0
4.5	909 20	949 19	986 18	1021 17	1052 15	1080 13	1103 11	1123 9	1137 6	25.5
5.0	920 20	958 18	994 17	1027 15	1055 13					

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SECTION IV

TABLES OF THE LATITUDE

6

TABLES
OF THE
MOTION OF THE MOON

BY

ERNEST W. BROWN

PROFESSOR OF MATHEMATICS IN YALE UNIVERSITY

WITH THE ASSISTANCE OF

HENRY B. HEDRICK

CHIEF COMPUTER



SECTION III

NEW HAVEN : YALE UNIVERSITY PRESS

LONDON : HUMPHREY MILFORD

OXFORD UNIVERSITY PRESS

1919

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

Arg.	7 v	8 v	9 v	10 v	11 v	12 v	13 v	Arg.
d								d
-0.5	3689 - 229 4310	3462 - 225 4538	3239 - 220 4761	3021 - 214 4978	2811 - 206 5189	2609 - 198 5391	2416 - 188 5584	30.5
0.0	3685 236 4314	3450 233 4550	3218 229 4781	2992 224 5008	2772 217 5228	2559 208 5441	2355 199 5645	30.0
+0.5	3696 237 4304	3459 235 4540	3225 232 4774	2995 228 5005	2770 222 5230	2552 214 5448	2342 206 5658	29.5
1.0	3707 233 4292	3474 232 4525	3244 229 4756	3016 226 4984	2792 221 5207	2575 214 5425	2364 207 5636	29.0
1.5	3703 222 4296	3481 222 4518	3259 221 4740	3040 218 4960	2823 214 5176	2612 209 5388	2406 202 5594	28.5
2.0	3673 206 4326	3466 207 4533	3258 207 4741	3052 205 4947	2848 202 5152	2647 198 5352	2452 193 5548	28.0
2.5	3610 187 4390	3421 189 4578	3232 189 4767	3043 188 4956	2855 186 5144	2670 183 5330	2489 179 5511	27.5
3.0	3511 166 4489	3344 168 4656	3176 169 4824	3007 168 4993	2839 167 5161	2672 165 5327	2509 161 5499	27.0
3.5	3380 143 4619	3230 145 4764	3090 146 4909	2944 146 5056	2797 146 5202	2652 144 5347	2509 142 5491	26.5
4.0	3226 119 4774	3105 122 4894	2982 123 5017	2859 124 5141	2735 124 5264	2612 122 5388	2490 120 5510	26.0
4.5	3058 97 4941	2960 99 5039	2861 100 5139	2760 101 5239	2659 101 5341	2558 100 5442	2458 99 5541	25.5
5.0	2891 76 5109	2814 77 5185	2736 78 5264	2657 79 5342	2578 79 5421	2500 78 5500	2422 77 5578	25.0
5.5	2733 56 5267	2676 57 5353	2619 57 5439	2562 58 5525	2504 58 5611	2447 57 5697	2390 56 5799	24.5
6.0	2594 37 5405	2557 38 5443	2519 38 5480	2481 37 5518	2444 37 5555	2408 36 5592	2372 35 5627	24.0
6.5	2479 20 5520	2459 20 5540	2440 19 5560	2422 18 5578	2404 17 5595	2388 16 5612	2372 15 5627	23.5
7.0	2389 - 4 5611	2385 - 3 5614	2384 - 1 5616	2383 0 5616	2385 + 2 5615	2388 + 4 5612	2392 + 5 5607	23.0
7.5	2321 + 11 5678	2333 + 13 5666	2348 + 16 5652	2365 + 18 5634	2384 21 5615	2406 23 5593	2430 25 5569	22.5
8.0	2271 25 5728	2298 28 5702	2328 32 5672	2361 35 5638	2398 38 5601	2438 41 5562	2481 44 5519	22.0
8.5	2232 37 5767	2272 42 5727	2317 47 5683	2366 51 5634	2418 55 5581	2475 59 5524	2536 62 5464	21.5
9.0	2199 48 5800	2250 54 5749	2307 60 5692	2370 65 5630	2437 70 5562	2510 75 5490	2586 79 5413	21.0
9.5	2167 57 5832	2227 64 5772	2294 70 5705	2368 77 5632	2448 83 5552	2534 89 5466	2625 94 5371	20.5
10.0	2135 62 5864	2202 70 5798	2276 78 5724	2358 86 5642	2447 93 5553	2543 100 5456	2646 106 5354	20.0
10.5	2107 64 5892	2176 73 5823	2254 82 5746	2340 91 5659	2435 99 5565	2548 107 5462	2648 114 5351	19.5
11.0	2091 62 5908	2158 72 5841	2235 82 5765	2322 91 5678	2418 100 5582	2523 110 5477	2637 118 5363	19.0
11.5	2096 56 5903	2158 66 5842	2229 77 5770	2311 87 5688	2404 98 5596	2506 108 5493	2619 117 5381	18.5
12.0	2136 45 5863	2187 57 5812	2249 68 5750	2323 79 5677	2407 90 5592	2502 100 5497	2608 111 5391	18.0
12.5	2222 32 5777	2266 43 5739	2309 55 5691	2369 66 5630	2441 78 5558	2525 89 5475	2620 100 5380	17.5
13.0	2366 + 16 5633	2388 27 5612	2420 38 5579	2465 50 5535	2521 62 5479	2588 74 5411	2668 85 5332	17.0
13.5	2573 - 2 5426	2577 + 9 5423	2592 20 5408	2617 32 5382	2655 43 5345	2704 55 5296	2765 67 5235	16.5
14.0	2843 19 5156	2829 - 9 5170	2825 + 1 5174	2832 + 12 5168	2850 23 5150	2879 35 5121	2920 47 5080	16.0
14.5	3170 35 4830	3139 26 4861	3117 - 17 4882	3105 - 7 4895	3103 + 4 4896	3112 + 14 4888	3132 26 4868	15.5
15.0	3540 49 4460	3494 41 4505	3457 33 4543	3428 24 4572	3408 - 15 4592	3398 - 5 4602	3398 + 5 4602	15.0
15.5	3935 59 4064	3878 54 4121	3828 47 4172	3785 39 4215	3749 31 4250	3722 23 4278	3704 - 13 4296	14.5
16.0	4335 66 3665	4270 62 3729	4211 57 3789	4156 51 3843	4108 45 3892	4067 37 3933	4033 30 3967	14.0
16.5	4718 70 3281	4649 67 3350	4583 64 3416	4521 60 3479	4464 55 3538	4411 49 3588	4365 43 3635	13.5
17.0	5064 70 2935	4994 69 3005	4926 68 3074	4859 65 3141	4795 62 3204	4735 58 3264	4680 53 3320	13.0
17.5	5359 68 2641	5290 69 2709	5221 69 2778	5153 68 2847	5086 66 2914	5020 64 2980	4958 60 3042	12.5
18.0	5592 64 2408	5527 66 2473	5459 68 2540	5391 68 2609	5322 68 2677	5254 67 2745	5188 65 2812	12.0
18.5	5761 60 2239	5699 63 2300	5635 66 2365	5568 68 2432	5500 69 2500	5431 68 2569	5362 69 2638	11.5
19.0	5868 55 2132	5811 59 2189	5749 63 2250	5684 66 2315	5617 68 2382	5548 70 2452	5478 70 2522	11.0
19.5	5920 51 2080	5867 56 2133	5808 60 2191	5746 64 2254	5680 67 2319	5612 70 2388	5541 71 2459	10.5
20.0	5926 47 2073	5876 53 2123	5821 58 2179	5761 62 2238	5697 66 2303	5630 69 2370	5560 72 2440	10.0
20.5	5896 44 2104	5849 50 2151	5796 55 2204	5738 60 2261	5677 64 2323	5610 68 2386	5541 71 2459	9.5
21.0	5837 42 2163	5792 48 2208	5742 53 2258	5686 57 2313	5627 62 2373	5563 66 2437	5495 69 2505	9.0
21.5	5754 40 2240	5711 45 2288	5664 50 2336	5612 55 2388	5555 59 2445	5494 63 2506	5428 67 2572	8.5
22.0	5650 38 2349	5610 43 2390	5565 47 2435	5516 51 2484	5463 55 2537	5406 59 2594	5344 63 2655	8.0
22.5	5522 36 2477	5485 40 2515	5443 43 2559	5398 47 2602	5349 51 2651	5297 54 2703	5241 57 2759	7.5
23.0	5366 34 2633	5332 36 2668	5294 39 2706	5253 42 2747	5210 45 2790	5164 48 2836	5115 50 2885	7.0
23.5	5175 31 2824	5143 33 2856	5110 34 2890	5074 36 2925	5037 38 2963	4998 40 3002	4957 42 3043	6.5
24.0	4944 30 3056	4914 30 3086	4884 30 3116	4854 30 3146	4823 31 3177	4792 32 3208	4759 33 3241	6.0
24.5	4697 29 3332	4639 27 3360	4612 26 3387	4587 25 3413	4562 24 3438	4538 24 3462	4514 24 3486	5.5
25.0	4345 30 3654	4317 27 3682	4292 24 3708	4270 21 3730	4250 19 3750	4232 17 3768	4216 15 3784	5.0
25.5	3984 33 4016	3954 28 4046	3928 23 4072	3907 19 4093	3890 15 4110	3877 11 4123	3868 8 4132	4.5
26.0	3592 39 4408	3557 32 4443	3528 26 4472	3505 19 4494	3489 13 4511	3478 8 4521	3473 - 3 4527	4.0
26.5	3185 48 4814	3142 39 4858	3107 31 4893	3080 23 4920	3061 15 4939	3049 7 4950	3040 0 4954	3.5
27.0	2782 60 5218	2727 49 5272	2683 39 5317	2649 29 5351	2625 20 5375	2610 10 5390	2604 - 1 5396	3.0
27.5	2402 74 5598	2334 62 5665	2279 50 5721	2234 38 5765	2202 27 5798	2180 16 5820	2170 5 5830	2.5
28.0	2066 89 5933	1984 76 6016	1915 63 6085	1858 50 6142	1815 37 6185	1785 24 6215	1767 12 6233	2.0
28.5	1790 104 6210	1692 91 6308	1608 77 6391	1539 62 6461	1484 48 6516	1442 34 6558	1415 20 6585	1.5
29.0	1583 119 6416	1471 105 6528	1374 90 6626	1291 75 6709	1223 60 6777	1170 45 6830	1132 30 6868	1.0
29.5	1452 132 6548	1327 118 6673	1217 102 6783	1122 87 6878	1043 71 6957	979 56 7021	931 40 7069	+0.5
30.0	1391 142 6608	1257 127 6743	1137 112 6863	1032 97 6968	943 81 7056	870 65 7130	813 49 7187	0.0
30.5	1392 - 147 6607	1252 - 133 6748	1126 - 119 6874	1015 - 103 6985	919 - 88 7080	839 - 72 7161	775 - 56 7225	-0.5
Arg.	v 134	v 133	v 132	v 131	v 130	v 129	v 128	Arg.

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

Arg.	14 v	15 v	16 v	17 v	18 v	19 v	20 v	Arg.
d								d
-0.5	2233 - 177 5766	2062 - 166 5938	1902 - 153 6097	1756 - 140 6244	1623 - 126 6376	1504 - 112 6496	1400 - 97 6600	30.5
0.0	2160 189 5839	1977 178 6023	1805 165 6194	1646 152 6353	1501 138 6499	1369 124 6630	1253 109 6747	30.0
+0.5	2140 196 5859	1949 185 6050	1770 174 6230	1602 161 6398	1448 148 6552	1307 134 6693	1181 119 6819	29.5
1.0	2161 198 5838	1968 188 6032	1785 177 6215	1613 165 6386	1454 153 6546	1308 139 6692	1176 125 6824	29.0
1.5	2207 195 5793	2016 186 5983	1835 176 6164	1664 165 6335	1505 153 6494	1359 140 6641	1225 127 6775	28.5
2.0	2262 186 5738	2079 178 5920	1905 170 6095	1740 160 6260	1585 149 6414	1442 137 6557	1311 125 6688	28.0
2.5	2312 173 5687	2142 167 5857	1979 159 6020	1824 150 6176	1679 141 6321	1543 130 6457	1418 119 6581	27.5
3.0	2350 157 5650	2195 151 5805	2047 145 5953	1906 137 6094	1772 129 6228	1648 120 6352	1533 109 6467	27.0
3.5	2369 138 5631	2233 134 5767	2101 128 5898	1976 122 6023	1858 114 6142	1748 106 6252	1646 97 6354	26.5
4.0	2371 118 5629	2255 114 5745	2143 110 5857	2036 104 5964	1934 98 6066	1840 91 6160	1752 83 6248	26.0
4.5	2360 97 5639	2265 94 5735	2173 90 5827	2085 86 5915	2002 80 5998	1924 75 6076	1853 68 6147	25.5
5.0	2345 75 5654	2271 73 5729	2199 70 5800	2131 66 5860	2067			

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

Arg.	21	v	22	v	23	v	24	v	25	v	26	v	27	v	Arg.												
d															d												
-0.5	1310 -	82	6690	1236 -	67	6764	1176 -	52	6824	1132 -	37	6868	1102 -	22	6898	1088 -	7	6912	1088 +	7	6912	30.5					
0.0	1151	94	6849	1065	79	6935	994	63	7006	939	47	7061	900	31	7100	876	16	7124	869	0	7132	30.0					
+0.5	1070	104	6930	974	88	7026	894	72	7106	830	56	7170	782	40	7218	750	24	7250	734	-	8	7266	29.5				
1.0	1059	110	6941	956	94	7044	870	79	7130	799	63	7201	744	47	7256	706	31	7294	683	15	7317	29.0					
1.5	1105	113	6895	1000	98	7000	910	82	7090	835	67	7165	776	51	7224	732	35	7268	705	19	7295	28.5					
2.0	1193	111	6807	1089	97	6911	998	83	7002	923	68	7077	862	53	7138	817	38	7183	787	22	7213	28.0					
2.5	1306	106	6694	1206	94	6794	1119	80	6881	1045	66	6955	986	52	7014	941	38	7059	911	23	7089	27.5					
3.0	1429	98	6571	1336	87	6664	1256	74	6744	1188	62	6812	1132	49	6868	1091	35	6910	1062	21	6938	27.0					
3.5	1553	88	6447	1471	77	6529	1399	66	6601	1338	55	6662	1289	43	6711	1253	30	6748	1229	18	6772	26.5					
4.0	1673	75	6327	1603	66	6397	1542	56	6458	1490	46	6510	1450	35	6550	1420	24	6580	1402	13	6599	26.0					
4.5	1788	61	6212	1731	53	6269	1683	45	6317	1642	36	6358	1611	26	6389	1590	17	6410	1578	-	6	6422	25.5				
5.0	1904	46	6096	1861	39	6139	1826	32	6174	1798	24	6202	1778	16	6223	1765	-	8	1762	1762	1	6239	25.0				
5.5	2026	30	5974	2000	24	6000	1978	18	6022	1963	-	12	6038	1954	-	5	6046	1952	9	6043			24.5				
6.0	2163	-	5837	2152	-	9	5848	2145	-	4	5855	2144	+	1	5857	2147	+	6	5853	2156	12	5844	2171	18	5829	24.0	
6.5	2319	+	5681	2324	+	7	5676	2333	+	11	5667	2346	15	5654	2363	19	5637	2384	23	5616	2410	28	5590	23.5			
7.0	2496	22	5504	2519	24	5481	2544	27	5456	2573	30	5427	2605	33	5396	2639	36	5361	2677	39	5323	23.0					
7.5	2693	40	5307	2734	42	5266	2778	44	5222	2823	46	5177	2870	48	5130	2919	50	5081	2970	51	5030	22.5					
8.0	2903	60	5097	2964	61	5036	3026	62	4975	3088	64	4912	3153	65	4848	3218	65	4782	3284	66	4717	22.0					
8.5	3116	80	4884	3196	81	4804	3278	81	4723	3359	82	4641	3441	82	4559	3524	82	4477	3606	82	4395	21.5					
9.0	3320	100	4681	3420	100	4580	3520	101	4480	3621	101	4379	3723	101	4278	3823	100	4177	3922	99	4078	21.0					
9.5	3499	119	4501	3619	120	4381	3739	120	4261	3859	120	4141	3979	119	4021	4098	118	3902	4216	117	3785	20.5					
10.0	3643	137	4357	3780	138	4220	3919	138	4081	4057	138	3943	4196	138	3805	4333	136	3668	4468	134	3532	20.0					
10.5	3742	152	4258	3895	134	4105	4050	135	3950	4205	135	3795	4360	134	3640	4514	133	3486	4666	131	3334	19.5					
11.0	3795	164	4205	3960	166	4040	4128	168	3872	4296	169	3704	4466	169	3535	4634	168	3366	4801	166	3199	19.0					
11.5	3804	171	4196	3977	175	4023	4154	177	3846	4332	179	3668	4511	179	3489	4691	179	3310	4870	178	3131	18.5					
12.0	3779	174	4222	3955	178	4045	4136	182	3865	4319	184	3682	4504	186	3496	4691	186	3310	4877	186	3123	18.0					
12.5	3733	171	4267	3907	177	4093	4086	181	3914	4270	185	3730	4456	187	3544	4645	187	3356	4834	189	3166	17.5					
13.0	3685	163	4315	3852	170	4148	4025	175	3975	4203	180	3798	4385	184	3616	4570	186	3430	4757	188	3243	17.0					
13.5	3653	150	4347	3807	158	4193	3968	164	4032	4136	170	3865	4308	175	3692	4486	179	3515	4666	181	3335	16.5					
14.0	3653	133	4348	3790	141	4210	3935	149	4065	4088	156	3912	4247	161	3754	4411	166	3590	4579	170	3421	16.0					
14.5	3695	112	4305	3812	122	4188	3939	130	4061	4073	138	3927	4214	144	3786	4361	150	3639	4514	151	3486	15.5					
15.0	3786	90	4215	3881	100	4119	3985	109	4015	4098	117	3902	4219	124	3781	4347	131	3654	4480	136	3520	15.0					
15.5	3920	68	4081	3992	77	4008	4074	86	3926	4164	95	3836	4263	102	3737	4369	109	3631	4482	116	3519	14.5					
16.0	4089	45	3912	4138	54	3862	4197	63	3803	4265	72	3735	4341	80	3660	4424	87	3576	4515	94	3486	14.0					
16.5	4277	24	3723	4305	32	3695	4342	41	3658	4387	49	3613	4441	57	3560	4502	64	3499	4570	71	3431	13.5					
17.0	4468	4	3532	4476	12	3524	4492	20	3508	4516	28	3484	4548	36	3452	4587	43	3413	4633	49	3367	13.0					
17.5	4643	-	3358	4633	-	6	3368	4630	+	1	3370	4634	+	8	3366	4665	22	3336	4690	28	3311	12.5					
18.0	4788	29	3213	4762	23	3239	4742	-	16	3258	4729	-	10	3272	4722	-	4	3279	4721	+	3	3279	4727	+	9	3273	12.0
18.5	4893	43	3107	4853	37	3148	4818	32	3182	4789	26	3211	4766	21	3235	4748	-	15	3253	4730	-	9	3265	11.5			
19.0	4955	54	3046	4903	50	3098	4855	45	3145	4812	41	3188	4774	36	3227	4740	31	3260	4712	26	3289	11.0					
19.5	4975	64	3025	4913	61	3087	4854	57	3146	4799	53	3202	4747	49	3253	4700	45	3301	4657	41	3344	10.5					
20.0	4962	72	3038	4891	70	3109	4822	67	3178	4757	64	3244	4694	61	3307	4634	58	3366	4578	54	3422	10.0					
20.5	4923	78	3077	4846	77	3155	4770	75	3231	4695	73	3305	4623	71	3377	4554	68	3447	4487	65	3514	9.5					
21.0	4870	82	3130	4788	82	3212	4706	81	3294	4626	80	3374	4547	78	3454	4499	76	3531	4394	75	3607	9.0					
21.5	4811	84	3190	4727	84	3274	4642	84	3358	4558	84	3442	4475	83	3526	4392	82	3608	4310	81	3690	8.5					
22.0	4750	82	3250	4668	84	3333	4583	84	3417	4499	85	3502	4414	85	3587	4329	85	3672	4244	85	3756	8.0					
22.5	4690	78	3310	4611	80	3389	4531	81	3470	4449	82	3552	4366	83	3635	4282	84	3719	4197	85	3803	7.5					
23.0	4626	71	3375	4554	73	3447	4480	75	3521	4404	77	3597	4326	78	3674	4247	80	3753	4167	81	3834	7.0					
23.5	4548	61	3453	4486	63	3515	4422	65	3579	4356	67	3645	4288	69	3713	4217	71	3783	4145	73	3856	6.5					
24.0	4444	47	3556	4396	50	3605	4345	52	3656	4292	54	3709	4236	57	3765	4178	59	3823	4118	62	3883	6.0					
24.5	4393	32	3698	4270	34	3730	4235	36	3765	4198	39	3802	4158	41	3842	4116	44	3884	4071	46	3929	5.5					
25.0	4114	-	3887	4098	-	16	3902	4081	-	18	3919	4062	-	20	3938	4041	23	3960	4017	25	3984	5.0					
25.5	3869	+	4132	3872	+	2	4129	3873	+	1	4127	3874	0	4127	3872	-	2	4128	3869	-	5						

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

Table with columns for Arg., 35, 36, 37, 38, 39, 40, 41, and Arg. containing numerical data for vertical and horizontal arguments.

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

Table with columns for Arg., 42, 43, 44, 45, 46, 47, 48, and Arg. containing numerical data for vertical and horizontal arguments.

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

Table with columns for Arg., 49, 50, 51, 52, 53, 54, 55, and Arg. containing numerical data for vertical and horizontal arguments.

TABLE I (cont.).

Vert. Arg. D.

Hor. Arg. I.

Table with columns for Arg., 56, 57, 58, 59, 60, 61, 62, and Arg. containing numerical data for vertical and horizontal arguments.

TABLE I (concl.).

Vert. Arg. D.

Hor. Arg. 1.

Table I (concl.) with columns for Arg. (63-70), v, and d. It contains numerical data for various lunar arguments and vertical/horizontal arguments.

TABLE 2.

Vert. Arg. D.

Hor. Arg. 2.

Table 2 with columns for Arg. (0-30.5), v, and d. It contains numerical data for various lunar arguments and vertical/horizontal arguments.

TABLE 2 (cont.).

Vert. Arg. D.

Hor. Arg. 2.

Arg.	14 v	16 v	18 v	20 v	22 v	24 v	26 v	Arg.
-0.5	1075 +29 925	1132 +28 868	1189 +28 811	1245 +28 755	1300 +27 700	1354 +27 646	1406 +26 594	30.5
0.0	1072 32 928	1135 32 865	1198 31 802	1261 31 739	1322 30 678	1382 30 618	1440 29 560	30.0
+0.5	1062 32 938	1125 32 875	1188 31 812	1250 31 750	1312 30 688	1372 30 628	1430 29 570	29.5
1.0	1045 28 955	1102 28 898	1158 28 842	1214 28 786	1270 27 730	1324 27 676	1377 26 623	29.0
1.5	1022 22 978	1067 22 933	1111 22 889	1155 22 845	1199 22 801	1242 21 758	1284 21 716	28.5
2.0	994 14 1006	1022 14 978	1050 14 950	1078 14 922	1106 14 894	1134 14 866	1162 14 838	28.0
2.5	964 + 4 1036	972 + 4 1028	981 + 4 1019	990 + 5 1010	1000 + 5 1000	1011 + 5 989	1022 + 6 978	27.5
3.0	934 - 6 1066	922 - 6 1078	911 - 5 1089	901 - 5 1099	892 - 4 1108	884 - 4 1116	877 - 3 1123	27.0
3.5	909 16 1091	878 15 1122	848 15 1152	819 14 1181	792 13 1208	766 12 1234	743 11 1257	26.5
4.0	892 24 1108	844 23 1156	798 23 1202	754 22 1246	711 21 1289	671 20 1329	633 18 1367	26.0
4.5	885 30 1115	826 29 1174	768 28 1232	712 27 1288	658 26 1342	607 25 1393	559 23 1441	25.5
5.0	890 33 1110	825 32 1175	761 32 1239	699 31 1301	638 29 1362	581 28 1419	527 26 1473	25.0
5.5	908 33 1092	843 33 1157	778 32 1222	715 31 1285	654 30 1346	596 29 1404	540 27 1460	24.5
6.0	940 30 1060	879 30 1121	820 30 1180	761 29 1239	704 28 1296	650 27 1350	598 25 1402	24.0
6.5	981 25 1019	931 25 1069	881 25 1119	832 24 1168	784 24 1216	738 23 1262	694 22 1306	23.5
7.0	1029 18 971	993 18 1007	957 18 1043	921 18 1079	886 17 1114	852 17 1148	819 16 1181	23.0
7.5	1079 10 921	1059 10 941	1040 10 960	1020 10 980	1000 10 1000	981 10 1019	961 10 1039	22.5
8.0	1125 - 1 875	1123 - 1 877	1121 - 1 879	1118 - 2 882	1115 - 2 885	1111 - 2 889	1106 - 2 894	22.0
8.5	1162 + 8 838	1178 + 8 822	1192 + 7 808	1206 + 7 794	1218 + 6 782	1230 + 5 770	1240 + 5 760	21.5
9.0	1184 16 816	1215 15 785	1244 14 756	1273 14 727	1299 13 701	1324 12 676	1348 11 652	21.0
9.5	1188 21 812	1230 21 770	1271 20 729	1311 19 689	1349 18 651	1385 17 615	1419 16 581	20.5
10.0	1169 25 831	1218 24 782	1267 24 733	1314 23 686	1360 22 640	1403 21 597	1444 20 556	20.0
10.5	1127 26 873	1179 26 821	1230 25 770	1280 25 720	1328 24 672	1375 23 625	1420 22 580	19.5
11.0	1064 24 936	1113 24 887	1162 24 838	1210 24 790	1257 23 743	1303 23 697	1348 22 652	19.0
11.5	984 20 1016	1026 21 974	1067 21 933	1109 21 891	1151 21 849	1192 20 808	1233 20 767	18.5
12.0	894 15 1106	924 15 1076	955 16 1045	986 16 1014	1019 17 981	1053 17 947	1086 17 914	18.0
12.5	802 + 7 1198	818 + 8 1182	835 + 9 1165	855 + 10 1145	876 + 11 1124	899 + 11 1101	923 + 12 1077	17.5
13.0	718 0 1282	719 + 1 1281	722 + 2 1278	728 + 4 1272	736 + 5 1264	747 + 6 1253	761 + 7 1239	17.0
13.5	653 - 8 1347	639 - 6 1361	628 - 5 1372	620 - 3 1380	616 - 1 1384	615 0 1385	618 + 2 1382	16.5
14.0	614 14 1386	587 12 1413	564 11 1436	545 9 1455	529 7 1471	518 - 5 1482	511 - 3 1489	16.0
14.5	610 19 1390	574 17 1426	541 15 1459	513 13 1487	489 11 1511	469 9 1531	453 7 1547	15.5
15.0	643 21 1357	602 20 1398	564 18 1436	530 16 1470	500 14 1500	475 12 1525	454 10 1546	15.0
15.5	714 22 1286	672 20 1328	633 19 1367	598 17 1402	566 15 1434	538 13 1462	514 11 1486	14.5
16.0	817 20 1183	779 18 1221	743 17 1257	710 16 1290	680 14 1320	653 13 1347	629 11 1371	14.0
16.5	945 15 1055	914 15 1086	885 14 1115	858 13 1142	833 12 1167	809 11 1191	788 10 1212	13.5
17.0	1085 10 915	1065 10 935	1046 10 954	1027 9 973	1009 9 991	991 8 1009	975 8 1025	13.0
17.5	1224 - 4 776	1216 - 4 784	1208 - 4 792	1199 - 5 801	1190 5 810	1180 5 820	1169 5 831	12.5
18.0	1349 + 3 651	1354 + 2 646	1356 + 1 644	1358 0 642	1357 - 1 643	1355 - 1 645	1352 - 2 648	12.0
18.5	1445 8 555	1461 7 539	1474 6 526	1485 + 5 515	1493 + 4 507	1499 + 2 501	1502 + 1 498	11.5
19.0	1503 13 497	1528 12 472	1549 10 451	1568 8 432	1583 7 417	1595 5 405	1604 4 396	11.0
19.5	1515 16 485	1545 14 455	1572 13 428	1596 11 404	1616 9 384	1633 8 367	1647 6 353	10.5
20.0	1477 17 523	1510 16 490	1539 14 461	1566 12 434	1589 11 411	1608 9 392	1624 7 376	10.0
20.5	1392 16 608	1424 15 576	1452 14 548	1478 12 522	1501 11 499	1522 9 478	1539 8 461	9.5
21.0	1266 14 734	1292 13 708	1317 12 683	1340 11 660	1361 10 639	1380 9 620	1396 8 604	9.0
21.5	1108 10 892	1127 9 873	1145 9 855	1163 8 837	1179 8 821	1195 8 805	1210 7 790	8.5
22.0	933 + 5 1067	942 + 5 1058	952 5 1048	962 5 1038	974 6 1026	985 6 1015	996 6 1004	8.0
22.5	754 - 1 1246	753 0 1247	754 + 1 1246	757 + 2 1243	761 + 3 1239	768 3 1233	775 4 1225	7.5
23.0	588 6 1412	577 - 5 1423	569 - 3 1431	564 - 2 1436	562 0 1438	564 + 1 1436	567 3 1433	7.0
23.5	451 11 1549	432 9 1568	416 7 1584	404 5 1596	396 - 3 1604	393 - 1 1607	393 + 1 1607	6.5
24.0	356 14 1644	330 12 1670	308 10 1692	291 7 1709	279 5 1721	272 2 1728	269 0 1731	6.0
24.5	314 16 1686	284 14 1716	259 11 1741	239 9 1761	224 6 1776	214 4 1786	210 - 1 1790	5.5
25.0	330 16 1670	300 14 1700	275 12 1725	254 9 1746	238 6 1762	222 4 1772	222 1 1778	5.0
25.5	407 15 1593	380 13 1620	357 10 1643	338 8 1662	324 6 1676	314 4 1686	309 1 1691	4.5
26.0	540 12 1460	518 10 1482	500 8 1500	486 6 1514	475 5 1525	468 3 1532	464 - 1 1536	4.0
26.5	718 7 1282	705 6 1295	694 5 1306	686 - 4 1314	680 - 2 1320	676 - 1 1324	675 0 1325	3.5
27.0	927 - 2 1073	924 - 1 1076	922 - 1 1078	921 0 1079	920 0 1080	921 0 1079	922 + 1 1078	3.0
27.5	1146 + 4 854	1154 + 4 846	1162 + 4 838	1168 + 3 832	1175 + 3 825	1180 + 2 820	1185 2 815	2.5
28.0	1356 10 644	1374 9 626	1391 8 609	1406 7 594	1418 6 582	1428 4 572	1436 3 564	2.0
28.5	1535 14 465	1562 13 438	1587 12 413	1608 10 392	1626 8 374	1641 6 359	1651 4 349	1.5
29.0	1665 18 335	1699 16 301	1730 14 270	1756 12 244	1778 10 222	1796 8 204	1808 5 192	1.0
29.5	1732 20 268	1770 18 230	1804 16 196	1834 14 166	1859 11 141	1878 8 122	1892 6 108	+0.5
30.0	1729 20 271	1768 18 232	1803 16 197	1833 14 167	1859 12 141	1879 9 121	1894 6 106	0.0
30.5	1655 +19 345	1692 +17 308	1724 +15 276	1753 +13 247	1778 +11 222	1798 +9 202	1813 +6 187	-0.5
Arg.	v 142	v 140	v 138	v 136	v 134	v 132	v 130	Arg.

TABLE 2 (cont.).

Vert. Arg. D.

Hor. Arg. 2.

Arg.	28 v	30 v	32 v	34 v	36 v	38 v	40 v	Arg.
-0.5	1457 +25 543	1505 +24 495	1552 +23 448	1596 +21 404	1637 +20 363	1674 +18 326	1709 +16 291	30.5
0.0	1496 28 504	1550 26 450	1602 25 398	1651 24 349	1696 22 304	1738 20 262	1776 18 224	30.0
+0.5	1487 28 513	1541 27 459	1593 25 407	1642 24 358	1688 22 312	1730 20 270	1769 18 231	29.5
1.0	1428 25 572	1478 24 522	1525 23 475	1570 22 430	1613 20 387	1652 19 348	1688 17 312	29.0
1.5	1326 20 674	1366 20 634	1405 19 595	1442 18 558	1477 17 523	1510 16 490	1541 15 459	28.5
2.0	1190 14 810	1217 14 783	1244 13 756	1270 13 730	1295 12 705	1319 12 681	1342 11 658	28.0
2.5	1033 + 6 967	1045 + 6 955	1058 + 6 942	1071 + 7 929	1085 7 915	1098 7 902	1112 7 888	27.5
3.0	872 - 2 1128	868 - 1 1132	866 - 1 1134	866 0 1134	867 + 1 1133	870 + 2 1130	874 + 3 1126	27.0
3.5	722 10 1278	703 9 1297	687 7 1313	674 - 6 1326	663 - 5 1337	655 - 3 1345	650 - 2 1350	26.5
4.0	599 17 1401	567 15 1433	538 13 1462	514 11 1486	493 10 1507	476 8 1524	462 6 1538	26.0
4.5	514 22 1486	472 20 1528	435 18 1565	401 16 1599	372 13 1628	348 11 1652	328 9 1672	25.5
5.0	476 25 1524	428 23 1572	385 20 1615	347 18 1653	313 16 1687	284 13 1716	259 11 1741	25.0
5.5	488 25 1512	439 23 1561	394 21 1606	354 19 1646	318 17 1682	286 14 1714	260 12 1740	24.5
6.0	548 24 1452	502 22 1498	460 20 1540	421 18 1579	386 16 1614	356 14 1644	330 12 1670	24.0
6.5	652 20 1348	612 19 1388	576 18 1424	542 16 1458	511 15 1489	483 13 1517	459 11 1541	23.5
7.0	788 15 1212	758 15 1242	729 14 1271	703 13 1297	678 12 1322	656 10 1344	636 9 1364	23.0
7.5	943 9 1057	924 9 1076	906 9 1094	889 8 1111	873 8 1127	858 7 1142	843 7 1157	22.5
8.0	1101 - 3 899	1096 - 3 904	1089 - 3 911	1083 - 3 917	1076 - 4 924	1068 - 4 932	1060 4	

TABLE 2 (cont.).

Vert. Arg. D.

Hor. Arg. 2.

Arg.	42 v	44 v	46 v	48 v	50 v	52 v	54 v	Arg.							
d								d							
-0.5	1739 + 14	261	1766 + 12	234	1788 + 10	212	1805 + 7	195	1817 + 5	183	1824 + 2	176	1825 - 1	175	30.5
0.0	1810 16	190	1839 13	161	1864 11	136	1883 8	117	1896 5	104	1904 2	96	1906 - 1	94	30.0
+0.5	1803 16	197	1833 14	167	1858 11	142	1878 9	122	1893 6	107	1901 3	99	1904 0	96	29.5
1.0	1720 15	280	1748 13	252	1772 11	228	1792 9	208	1806 6	194	1816 3	184	1820 + 1	180	29.0
1.5	1569 13	431	1594 12	406	1615 10	385	1633 8	367	1647 6	353	1657 4	343	1663 2	337	28.5
2.0	1364 10	636	1384 9	616	1401 8	599	1417 7	583	1430 6	570	1440 4	560	1448 3	552	28.0
2.5	1126 7	874	1140 7	860	1153 6	847	1165 6	835	1177 6	823	1188 5	812	1197 4	803	27.5
3.0	880 + 3	1120	887 4	1113	895 4	1105	904 5	1096	914 5	1086	925 5	1075	936 6	1064	27.0
3.5	648 0	1352	648 + 1	1352	652 + 2	1348	658 3	1342	666 5	1334	676 6	1324	689 7	1311	26.5
4.0	453 - 4	1547	448 - 2	1552	446 0	1554	449 2	1551	455 4	1545	465 6	1535	478 7	1522	26.0
4.5	313 6	1687	303 4	1697	297 - 2	1703	297 + 1	1703	301 3	1699	309 5	1691	322 8	1678	25.5
5.0	240 8	1761	226 6	1774	217 3	1783	214 0	1786	216 2	1784	223 5	1777	235 7	1765	25.0
5.5	239 9	1761	223 7	1777	212 4	1788	206 - 2	1794	206 + 1	1794	210 4	1790	220 6	1780	24.5
6.0	308 10	1692	291 7	1709	279 5	1721	271 2	1729	269 0	1731	271 2	1729	278 5	1722	24.0
6.5	439 9	1561	423 7	1577	410 5	1590	401 3	1599	397 - 1	1603	396 + 1	1604	399 + 2	1601	23.5
7.0	619 8	1381	604 7	1396	592 5	1408	583 4	1417	576 3	1424	572 - 1	1428	571 0	1429	23.0
7.5	830 6	1170	818 6	1182	808 5	1192	798 4	1202	790 4	1210	783 3	1217	777 - 2	1223	22.5
8.0	1052 4	948	1044 4	956	1035 4	965	1026 5	974	1017 5	983	1007 5	993	998 5	1002	22.0
8.5	1264 - 2	736	1260 3	740	1254 4	746	1246 4	754	1236 5	764	1225 6	775	1212 7	788	21.5
9.0	1447 + 1	553	1447 - 1	553	1444 2	556	1438 4	562	1429 5	571	1417 7	583	1402 8	598	21.0
9.5	1583 3	417	1587 + 1	413	1588 - 1	412	1584 3	416	1577 5	423	1565 7	435	1550 9	448	20.5
10.0	1659 6	341	1668 3	332	1672 + 1	328	1672 - 1	328	1667 4	333	1658 6	342	1644 8	356	20.0
10.5	1660 8	331	1682 6	318	1691 3	309	1694 + 1	306	1694 - 2	306	1688 4	312	1677 7	323	19.5
11.0	1612 10	388	1630 8	370	1642 5	358	1651 3	349	1655 + 1	345	1654 - 2	346	1648 4	352	19.0
11.5	1496 11	504	1516 9	484	1533 7	467	1546 6	454	1555 + 1	445	1560 - 1	440	1560 - 1	440	18.5
12.0	1331 12	669	1354 11	646	1374 10	626	1392 8	608	1406 6	594	1418 5	582	1426 + 3	574	18.0
12.5	1136 13	864	1161 12	839	1184 11	816	1206 10	794	1225 9	775	1243 8	757	1258 7	742	17.5
13.0	932 13	1068	958 13	1042	983 13	1017	1008 12	992	1032 12	968	1055 11	945	1077 11	923	17.0
13.5	742 12	1258	766 13	1234	792 13	1208	819 14	1181	846 14	1154	874 14	1126	902 14	1098	16.5
14.0	586 11	1414	609 12	1391	634 13	1366	661 14	1339	689 15	1311	719 15	1281	750 16	1250	16.0
14.5	481 9	1519	501 11	1499	524 12	1476	549 13	1451	576 14	1424	606 15	1394	637 16	1363	15.5
15.0	440 7	1560	455 9	1545	474 10	1526	495 11	1505	520 13	1480	546 14	1454	575 15	1425	15.0
15.5	465 4	1535	475 6	1525	489 7	1511	504 9	1496	523 10	1477	544 11	1456	567 12	1433	14.5
16.0	554 + 1	1446	559 + 3	1441	565 + 4	1435	574 5	1426	585 6	1415	598 7	1402	613 8	1387	14.0
16.5	697 - 2	1303	695 - 1	1305	694 0	1306	695 + 1	1305	697 + 1	1303	700 + 2	1300	705 + 3	1295	13.5
17.0	876 4	1124	868 4	1132	859 - 4	1141	852 - 4	1148	844 - 4	1156	837 - 3	1163	830 - 3	1170	13.0
17.5	1072 7	928	1057 7	943	1042 8	958	1026 8	974	1009 8	991	992 9	1008	974 9	1026	12.5
18.0	1262 9	738	1242 10	758	1221 11	779	1198 12	802	1174 13	826	1147 14	853	1120 14	880	12.0
18.5	1426 10	574	1403 12	597	1378 13	622	1350 15	650	1319 16	681	1286 17	714	1250 18	750	11.5
19.0	1546 11	454	1522 13	478	1495 14	505	1464 16	536	1430 18	570	1393 19	607	1353 21	647	11.0
19.5	1610 10	390	1587 12	413	1561 14	439	1530 16	470	1496 18	504	1458 20	542	1417 21	583	10.5
20.0	1612 9	388	1592 11	408	1569 13	431	1541 15	459	1510 17	490	1475 18	525	1437 20	563	10.0
20.5	1552 6	448	1537 8	463	1519 10	481	1497 12	503	1472 13	528	1444 15	556	1412 16	588	9.5
21.0	1435 - 3	565	1427 - 5	573	1417 6	583	1403 7	597	1387 9	613	1368 10	632	1347 11	653	9.0
21.5	1274 + 1	726	1274 0	726	1273 - 1	727	1270 - 2	730	1264 - 3	736	1257 - 4	743	1248 - 5	752	8.5
22.0	1084 5	916	1093 + 4	907	1102 + 4	898	1110 + 4	890	1116 + 3	884	1122 + 3	878	1127 + 2	873	8.0
22.5	884 9	1116	902 9	1098	920 9	1080	939 9	1061	958 9	1042	977 10	1023	995 10	1004	7.5
23.0	693 12	1307	719 13	1281	746 14	1254	775 15	1225	805 15	1193	836 16	1164	868 16	1132	7.0
23.5	530 15	1470	562 17	1438	596 18	1404	633 19	1367	672 20	1328	714 21	1286	756 22	1244	6.5
24.0	412 17	1588	447 19	1553	486 20	1514	529 22	1471	574 23	1426	622 24	1378	671 25	1329	6.0
24.5	350 18	1650	387 20	1613	428 21	1572	472 23	1528	519 24	1481	570 26	1430	622 27	1378	5.5
25.0	352 17	1648	388 19	1612	427 20	1573	469 22	1531	514 23	1486	563 25	1437	613 26	1387	5.0
25.5	420 15	1580	451 16	1549	485 18	1515	522 19	1478	561 20	1439	602 21	1398	646 22	1354	4.5
26.0	550 11	1450	573 12	1427	598 13	1402	625 14	1375	654 15	1346	685 16	1315	718 17	1282	4.0
26.5	729 6	1271	742 7	1258	756 7	1244	771 + 8	1229	787 + 8	1213	804 + 8	1196	821 + 9	1179	3.5
27.0	941 + 1	1059	943 + 1	1057	944 + 1	1056	945 0	1055	946 0	1054	946 0	1054	946 0	1054	3.0
27.5	1167 - 5	833	1156 - 6	844	1144 - 6	856	1131 - 7	869	1115 - 8	885	1098 - 9	902	1080 - 10	920	2.5
28.0	1384 10	616	1363 12	637	1338 13	662	1310 15	690	1279 16	721	1246 17	754	1210 18	790	2.0
28.5	1571 14	429	1540 17	460	1505 19	495	1465 21	535	1421 23	579	1374 25	626	1323 26	677	1.5
29.0	1710 18	290	1672 20	328	1629 23	371	1581 25	419	1528 28	472	1470 30	530	1409 32	591	1.0
29.5	1787 19	213	1746 22	254	1699 25	301	1646 28	354	1589 30	411	1526 32	474	1459 34	541	+0.5
30.0	1795 19	205	1755 22	245	1708 25	292	1656 27	344	1599 30	401	1537 32	463	1470 34	530	0.0
30.5	1733 - 17	267	1697 - 19	303	1656 - 22	344	1609 - 25	391	1558 - 27	442	1501 - 29	499	1441 - 31	559	-0.5
Arg.	v	114	v	112	v	110	v	108	v	106	v	104	v	102	Arg.

TABLE 2 (cont.).

Vert. Arg. D.

Hor. Arg. 2.

Arg.	56 v	58 v	60 v	62 v	64 v	66 v	68 v	Arg.							
d								d							
-0.5	1821 - 4	179	1811 - 6	189	1795 - 9	205	1774 - 12	226	1746 - 15	254	1713 - 18	287	1675 - 21	325	30.5
0.0	1902 4	98	1891 7	109	1874 10	126	1851 13	149	1822 16	178					

TABLE 2 (concl.).

Vert. Arg. D.

Hor. Arg. 2.

Arg.	70 v	72 v	74 v	76 v	78 v	Arg.
d						d
-0.5	1631-23 369	1582-26 418	1528-28 472	1469-30 531	1407-32	30.5
0.0	1697 25 303	1643 28 357	1585 30 415	1522 33 478	1454 35	30.0
+0.5	1702 25 298	1649 28 351	1592 30 408	1529 32 471	1462 34	29.5
1.0	1647 22 353	1600 25 400	1548 27 452	1492 29 508	1432 31	29.0
1.5	1537 17 493	1501 19 499	1460 21 540	1415 23 585	1366 25	28.5
2.0	1386 11 614	1363 13 637	1336 14 664	1306 16 694	1274 17	28.0
2.5	1208-4 792	1200-5 800	1190-6 810	1177-7 823	1163-8	27.5
3.0	1020+4 980	1028+4 972	1035+3 965	1041+3 959	1046+2	27.0
3.5	841 11 1159	863 11 1137	886 11 1114	909 11 1091	932 11	26.5
4.0	684 17 1316	719 18 1281	755 18 1245	792 19 1208	830 19	26.0
4.5	564 21 1436	608 22 1392	654 23 1346	701 24 1299	750 25	25.5
5.0	490 23 1510	538 25 1462	588 26 1412	641 27 1359	696 28	25.0
5.5	404 23 1536	511 24 1489	562 26 1438	614 27 1386	670 28	24.5
6.0	486 20 1514	528 22 1472	574 23 1426	621 24 1379	671 25	24.0
6.5	552 16 1448	585 17 1415	621 18 1379	659 19 1341	699 20	23.5
7.0	654 10 1346	675 11 1325	697 12 1303	722 13 1278	748 14	23.0
7.5	781+3 1219	787+4 1213	795+4 1205	804+5 1196	814+5	22.5
8.0	921-4 1079	912-4 1088	904-4 1096	897-4 1103	890-3	22.0
8.5	1062 11 938	1039 11 961	1016 12 984	993 12 1007	970 12	21.5
9.0	1193 17 807	1158 18 842	1122 18 878	1086 18 914	1048 19	21.0
9.5	1303 21 697	1259 22 741	1214 23 786	1168 24 832	1120 24	20.5
10.0	1384 23 616	1336 24 664	1286 25 714	1234 26 766	1180 27	20.0
10.5	1431 23 569	1384 24 616	1333 26 667	1281 27 719	1226 28	19.5
11.0	1443 21 557	1400 22 600	1354 23 646	1306 25 694	1256 25	19.0
11.5	1420 16 580	1386 18 614	1349 19 651	1310 20 690	1269 21	18.5
12.0	1366 10 634	1344 12 656	1320 13 680	1294 14 706	1266 15	18.0
12.5	1289-3 711	1281-4 719	1272-5 728	1260-6 740	1246-7	17.5
13.0	1196+4 804	1203+3 797	1208+2 792	1212+1 788	1214+1	17.0
13.5	1098 10 902	1118 10 882	1136 9 864	1154 8 846	1170 8	16.5
14.0	1002 15 998	1032 15 968	1062 15 938	1090 14 910	1118 14	16.0
14.5	917 18 1083	953 18 1047	989 18 1011	1025 18 975	1061 18	15.5
15.0	849 19 1151	887 19 1113	924 19 1076	962 19 1038	1000 19	15.0
15.5	802 17 1198	836 17 1164	870 17 1130	904 17 1096	939 18	14.5
16.0	777 12 1223	802 13 1198	828 13 1172	854 13 1146	882 14	14.0
16.5	774+6 1226	787+6 1213	800+7 1200	814+7 1186	830 8	13.5
17.0	790-1 1210	788-1 1212	786-1 1214	785 0 1215	786+1	13.0
17.5	820 9 1180	802 9 1198	785 8 1215	768-8 1232	754-7	12.5
18.0	862 17 1138	828 16 1172	796 16 1204	765 15 1235	734 15	12.0
18.5	908 23 1092	862 23 1138	818 22 1182	774 22 1226	731 21	11.5
19.0	956 27 1044	902 27 1098	848 27 1152	795 26 1205	744 25	11.0
19.5	1001 29 999	943 29 1057	886 29 1114	829 28 1171	774 28	10.5
20.0	1041 28 959	985 28 1015	930 28 1070	874 28 1126	820 27	10.0
20.5	1075 24 925	1026 24 974	977 24 1023	928 24 1072	880 24	9.5
21.0	1101 18 899	1064 18 936	1027 19 973	989 19 1031	952 19	9.0
21.5	1120 11 880	1098 11 902	1076 11 924	1053 11 947	1030 12	8.5
22.0	1131-2 869	1127-2 873	1122-3 878	1116-3 884	1110-3	8.0
22.5	1135+7 865	1150+7 850	1163+6 837	1175+5 825	1186+5	7.5
23.0	1133 16 867	1165 15 835	1195 15 805	1224 14 776	1252 14	7.0
23.5	1126 23 874	1171 23 829	1216 22 784	1259 21 741	1301 20	6.5
24.0	1113 28 887	1169 28 831	1223 27 777	1277 26 723	1329 25	6.0
24.5	1095 30 905	1155 30 845	1215 30 785	1274 29 726	1330 28	5.5
25.0	1072 30 928	1131 29 869	1190 29 810	1248 29 752	1304 28	5.0
25.5	1045 26 955	1097 26 903	1149 26 851	1200 25 800	1250 25	4.5
26.0	1013 20 987	1053 20 947	1092 20 908	1131 19 869	1170 19	4.0
26.5	979 11 1021	1001 11 999	1023 11 977	1046 11 954	1068 11	3.5
27.0	944+1 1056	948+1 1055	950+2 1052	954+2 1050	954+2	3.0
27.5	910-10 1090	890-10 1110	870-9 1130	853-8 1147	837-8	2.5
28.0	879 21 1121	838 20 1162	799 19 1201	762 18 1238	726 17	2.0
28.5	855 30 1145	796 29 1204	740 28 1260	685 26 1315	634 25	1.5
29.0	840 36 1160	769 35 1231	699 34 1301	632 33 1368	568 31	1.0
29.5	838 40 1162	759 39 1241	682 38 1318	608 36 1392	538 34	+0.5
30.0	848 40 1152	769 39 1231	692 38 1308	617 36 1383	546 35	0.0
30.5	872-37 1128	799-36 1201	728-35 1272	659-34 1341	593-32	-0.5
Arg.	v 86	v 84	v 82	v 80	Arg.	

TABLE 3.

Vert. Arg. D.

Hor. Arg. 3.

Arg.	0 v	2 v	4 v	6 v	8 v	10 v	12 v	14 v	Arg.
d									d
-0.5	243+6	256+7 284	270+7 270	285+8 255	301+8 239	318+9 222	336+9 204	355+10 185	30.5
0.0	259 7	273 7 267	288 7 252	303 8 237	319 8 221	336 9 204	354 9 186	372 9 168	30.0
+0.5	274 7	289 7 251	302 7 238	317 7 223	332 8 208	347 8 193	363 8 177	380 8 160	29.5
1.0	291 6	303 6 237	316 6 224	328 6 212	340 6 200	352 6 188	365 7 175	379 7 161	29.0
1.5	309 5	319 5 221	329 5 211	338 4 202	346 4 194	355 4 185	364 5 176	373 5 167	28.5
2.0	328 4	335 3 205	341 3 199	347 3 193	352+2 188	356+2 184	360+2 180	365+2 175	28.0
2.5	346 3	351 2 189	354+1 186	356+1 184	357 0 183	350 0 183	350 0 182	358 0 182	27.5
3.0	361 1	363+1 177	363 0 177	362-1 178	360-1 180	358-1 182	355-2 185	351-2 189	27.0
3.5	368+1	368 0 172	367-1 173	365 2 175	361 2 179	357 2 183	351 3 189	346 3 194	26.5
4.0	364 0	364 0 176	363 1 177	360 2 180	356 2 184	352 3 188	346 3 194	340 3 200	26.0
4.5	350+1	350 0 190	349-1 191	347-1 193	344 2 196	340 2 200	336 2 204	331 2 209	25.5
5.0	324 1	326 0 214	326 0 214	326 0 214	325-1 215	323-1 217	321-1 219	319-1 221	25.0
5.5	290 1	293+1 247	295+1 245	297+1 243	298+1 242	300+1 240	301 0 239	302 0 238	24.5
6.0	254 2	258 2 282	262 2 278	266 2 274	270 2 270	274 2 266	278+2 262	282+2 258	24.0
6.5	220 2	225 2 315	230 3 310	236 3 304	242 3 298	249 3 291	256 4 284	264 4 276	23.5
7.0	194 3	200 3 340	206 3 334	213 4 327	221 4 319	230 4 310	239 5 301	249 5 291	23.0
7.5	180 3	186 3 354	193 4 347	202 4 338	210 5 330	220 5 320	231 6 309	243 6 297	22.5
8.0	180 3	186 4 354	194 4 346	203 5 337	213 5 327	223 6 317	235 6 305	247 6 293	22.0
8.5	192 4	200 4 340	208 4 332	218 5 322	228 5 312	239 6 301	250 6 290	263 6 277	21.5
9.0	214 4	223 5 317	233 5 307	243 5 297	254 6 286	265 6 275	277 6 263	289 6 251	21.0
9.5	241 5	251 5 289	262 6 278	274 6 266	286 6 254	298 6 242	310 6 230	321 6 219	20.5
10.0	267 6	279 6 261	292 6 248	305 6 235	318 6 222	330 6 210	343 6 197	355 6 185	20.0
10.5	287 7	301 7 239	315 7 225	329 7 211	343 7 197	357 7 183	370 6 170	383 6 157	19.5
11.0	300 7	314 7 226	329 7 211	344 7 196	359 7 181	374 7 166	388 7 152	401 6 139	19.0
11.5	302 7	317 7 223	332 7 208	346 7 194	361 7 179	376 7 164	391 7 149	404 7 136	18.5
12.0	297 6	310 7 230	324 7 216	337 7 203	351 7 189	365 7 175	379 7 161	393 7 147	18.0
12.5	288 5	298 6 242	308 5 232	319 6 221	331 6 209	344 6 196	356 7 184	370 7 170	17.5
13.0	277 3	283 3 257	290 4 250	297 4 243	306 5 234	316 5 224	327 6 213	339 6 201	17.0
13.5	269+1	270+1 270	273+2 267	277+2 263	282 3 258	289 4 251	297 4 243	306 5 234	16.5
14.0	265-1	263-1 277	262 0 278	262 0 278	263+1 277	266 2 274	272 3 268	278 4 262	16.0
14.5	266 2	262 2 278	258-2 282	254-1 286	253 0 287	253+1 287	256 2 284	260 3 280	15.5
15.0	270 3	264 3 276	259 2 281	254 2 286	251-1 289	250 0 290	250 1 290	253 2 287	15.0
15.5	274 2	269 2 271	264 2 276	260 2 280	256-1 284	255 0 285	255 1 285	257 2 283	14.5
16.0	275-1	272-1 268	270-1 270	268-1 272	266 0 274	266 0 274	267 1 273	270 2 270	14.0
16.5	271+1	272+1 268	274+1 266	275+1 265	276+1				

TABLE 3 (cont.).

Vert. Arg. D.

Hor. Arg. 3.

Table with columns for Arg., 16 v, 18 v, 20 v, 22 v, 24 v, 26 v, 28 v, 30 v, and Arg. containing numerical data for various angles from -0.5 to 30.5.

TABLE 3 (cont.).

Vert. Arg. D.

Hor. Arg. 3.

Table with columns for Arg., 32 v, 34 v, 36 v, 38 v, 40 v, 42 v, 44 v, 46 v, and Arg. containing numerical data for various angles from -0.5 to 30.5.

TABLE 3 (concl.).

Vert. Arg. D.

Hor. Arg. 3.

Arg.	48 v	50 v	52 v	54 v	56 v	58 v	Arg.
d							d
-0.5	448-13 92	420-15 120	389-16 151	356-17 184	321-18 219	286-18	30.5
0.0	452 14 88	423 15 117	391 17 149	356 18 184	319 19 221	282 19	30.0
+0.5	447 13 93	418 15 122	386 17 154	352 18 188	316 18 224	278 19	29.5
1.0	429 12 111	403 14 137	374 15 166	342 16 198	308 17 232	273 18	29.0
1.5	401 10 139	378 12 162	353 13 187	325 14 215	295 15 245	264 16	28.5
2.0	364 9 176	346 10 194	325 11 215	302 12 238	277 13 263	251 13	28.0
2.5	325 7 215	310 8 230	293 9 247	275 9 265	256 10 284	236 10	27.5
3.0	288 5 252	277 6 263	264 7 276	250 7 290	236 7 304	220 8	27.0
3.5	262 4 278	253 5 287	243 5 297	232 5 308	221 6 319	210 6	26.5
4.0	248 4 292	241 4 299	233 4 307	225 4 315	216 4 324	208 4	26.0
4.5	251 3 289	245 3 295	238 3 302	231 4 309	224 4 316	216 4	25.5
5.0	267 3 273	261 3 279	255 3 285	249 3 291	242 3 298	236 3	25.0
5.5	294 2 246	289 3 251	283 3 257	277 3 263	270 3 270	264 4	24.5
6.0	325 2 215	320 2 220	315 3 225	310 3 230	303 3 237	296 4	24.0
6.5	354 1 186	350 2 190	346 3 194	340 3 200	333 4 207	326 4	23.5
7.0	376 1 164	373 2 167	369 2 171	364 3 176	357 4 183	349 4	23.0
7.5	389 1 151	386 2 154	382 3 158	376 3 164	369 4 171	360 4	22.5
8.0	391 1 149	387 2 153	382 3 158	376 4 164	368 4 172	359 5	22.0
8.5	384 2 156	378 3 162	372 4 168	364 4 176	354 5 186	344 6	21.5
9.0	370 4 170	362 4 178	353 5 187	342 5 198	331 6 209	319 6	21.0
9.5	355 6 185	343 6 197	330 7 210	317 7 223	303 7 237	288 7	20.5
10.0	341 8 199	325 8 215	309 8 231	292 9 248	274 9 266	257 8	20.0
10.5	332 10 208	312 10 228	292 10 248	271 10 269	251 10 289	231 10	19.5
11.0	328 11 212	305 12 235	282 12 258	258 12 282	235 11 305	212 11	19.0
11.5	330 12 210	305 13 235	280 13 260	254 13 286	229 12 311	205 12	18.5
12.0	334 12 206	309 13 231	283 13 257	257 13 283	231 13 309	206 12	18.0
12.5	340 12 200	316 12 224	290 13 250	265 13 275	239 13 301	214 12	17.5
13.0	344 11 196	322 11 218	298 12 242	274 12 266	250 12 290	227 11	17.0
13.5	345 9 195	326 10 214	305 11 235	284 11 256	262 11 278	240 11	16.5
14.0	345 8 195	329 9 211	311 9 229	292 10 248	272 10 268	252 10	16.0
14.5	345 6 195	331 7 209	315 8 225	298 9 242	280 9 260	262 9	15.5
15.0	347 5 193	335 7 205	321 8 219	305 8 235	288 9 252	270 9	15.0
15.5	354 5 186	343 6 197	329 7 211	314 8 226	297 9 243	278 9	14.5
16.0	367 5 173	356 6 184	342 8 198	325 9 215	307 9 233	288 10	14.0
16.5	384 5 156	372 7 168	357 8 183	340 9 200	321 10 219	300 11	13.5
17.0	404 6 136	391 7 149	375 9 165	356 10 184	335 11 205	313 11	13.0
17.5	420 6 120	406 8 134	390 9 150	371 10 169	349 11 191	326 12	12.5
18.0	430 6 110	416 8 124	399 9 141	379 10 161	358 11 182	334 12	12.0
18.5	429 6 111	415 8 125	398 9 142	380 10 160	358 11 182	335 12	11.5
19.0	416 6 124	402 7 138	387 8 153	369 9 171	349 10 191	328 11	11.0
19.5	391 6 149	378 7 162	363 8 177	346 9 194	328 9 212	309 10	10.5
20.0	357 6 183	344 7 196	330 7 210	315 8 225	299 8 241	283 8	10.0
20.5	319 6 221	307 6 233	294 7 246	280 7 260	266 7 274	252 7	9.5
21.0	284 6 256	271 6 269	259 6 281	246 6 294	233 6 307	221 6	9.0
21.5	255 6 285	243 6 297	230 6 310	218 6 322	207 6 333	196 6	8.5
22.0	238 6 302	226 6 314	214 6 326	202 6 338	191 5 349	181 5	8.0
22.5	234 6 306	222 6 318	210 6 330	199 5 341	189 5 351	180 4	7.5
23.0	243 6 297	231 6 309	220 5 320	210 5 330	200 5 340	191 4	7.0
23.5	261 5 279	251 5 289	241 5 299	232 5 308	223 4 317	214 4	6.5
24.0	284 4 256	276 4 264	268 4 272	260 4 280	252 4 288	244 4	6.0
24.5	310 3 230	304 3 236	297 3 243	290 3 250	284 4 256	276 4	5.5
25.0	334 2 206	329 3 211	323 3 217	317 3 223	311 3 229	304 3	5.0
25.5	353 2 187	349 2 191	343 3 197	337 3 203	331 3 209	324 4	4.5
26.0	368 2 172	363 3 177	356 3 184	349 4 191	341 4 199	332 4	4.0
26.5	379 3 161	372 4 168	363 5 177	352 5 188	341 6 199	330 6	3.5
27.0	389 5 151	378 6 162	364 7 176	350 7 190	335 8 205	320 8	3.0
27.5	400 8 140	384 9 156	365 10 175	345 10 195	325 10 215	304 10	2.5
28.0	412 10 128	390 11 150	366 12 174	341 13 199	315 13 225	289 13	2.0
28.5	424 12 116	397 14 143	369 15 171	339 15 201	307 16 233	276 16	1.5
29.0	433 14 107	404 15 136	372 17 168	338 17 202	302 18 238	267 18	1.0
29.5	438 15 102	407 16 133	373 17 167	337 18 203	300 19 240	262 19	+0.5
30.0	433 14 107	402 16 138	369 17 171	334 18 206	296 19 244	258 19	0.0
30.5	417-13 123	389-15 151	358-16 182	325-17 215	290-18 250	254-18	-0.5

TABLE 4.

Vert. Arg. D.

Hor. Arg. 4.

Arg.	0 v	1 v 63	2 v 64	3 v 65	4 v 66	5 v 67	6 v 68	Arg.
d								d
-0.5	3404-65	3336-68 664	3266-72 734	3192-76 808	3115-78 885	3035-81 965	2952-84 1048	30.5
0.0	3323 73	3248 76 752	3170 79 830	3090 82 910	3006 85 994	2920 87 1080	2831 89 1169	30.0
+0.5	3198 78	3119 81 881	3036 84 964	2951 86 1049	2864 89 1130	2774 91 1226	2682 93 1318	29.5
1.0	3039 81	2957 83 1043	2872 86 1128	2786 88 1214	2697 90 1303	2606 91 1394	2514 93 1486	29.0
1.5	2855 81	2773 83 1227	2689 85 1311	2604 86 1396	2516 88 1484	2428 89 1572	2338 90 1662	28.5
2.0	2658 78	2579 80 1421	2499 81 1501	2417 82 1583	2334 83 1666	2251 84 1749	2166 84 1834	28.0
2.5	2461 73	2388 74 1612	2313 75 1687	2238 76 1762	2162 76 1838	2086 76 1914	2009 76 1991	27.5
3.0	2275 66	2209 66 1791	2142 67 1858	2076 67 1924	2008 67 1992	1941 67 2059	1874 67 2126	27.0
3.5	2110 57	2053 57 1947	1996 57 2004	1939 57 2061	1882 57 2118	1825 56 2175	1769 56 2231	26.5
4.0	1973 47	1926 47 2074	1879 47 2121	1833 46 2167	1787 46 2213	1741 45 2259	1696 44 2304	26.0
4.5	1801 27	1775 26 2225	1749 26 2251	1724 25 2276	1699 24 2301	1674 23 2324	1649 22 2347	25.5
5.0	1769 17	1752 17 2248	1736 16 2264	1720 15 2280	1705 14 2295	1691 14 2309	1678 13 2322	25.0
5.5	1771 9	1762 8 2238	1755 8 2245	1747 7 2253	1741 6 2259	1735 6 2265	1729 5 2271	24.5
6.0	1804-2	1802-1 2198	1801-1 2199	1800 0 2200	1800 0 2200	1801 +1 2199	1802 +1 2198	24.0
6.5	1864+3	1867+4 2133	1871+4 2129	1875+4 2125	1880+4 2120	1884 5 2116	1889 5 2111	23.5
7.0	1945 7	1952 7 2048	1959 7 2041	1965 7 2035	1972 7 2028	1979 7 2021	1986 7 2014	23.0
7.5	2043 8	2051 8 1949	2058 7 1942	2065 7 1935	2072 7 1928	2079 7 1921	2086 6 1914	22.5
8.0	2151 6	2157 6 1843	2163 6 1837	2168 5 1832	2173 5 1827	2177 4 1823	2181 4 1819	22.0
8.5	2262+3	2264+2 1736	2266+2 1734	2268+1 1732	2268 0 1732	2268 0 1732	2268 0 1732	21.5
9.0	2369-3	2366-4 1634	2362-4 1638	2357-5 1643	2351-6 1649	2345-7 1655	2337 8 1663	21.0
9.5	2467 10	2456 11 1544	2444 12 1556	2431 13 1569	2417 15 1583	2402 16 1598	2386 17 1614	20.5
10.0	2547 19	2527 21 1473	2506 22 1494	2483 23 1517	2460 24 1540	2434 26 1566	2408 27 1592	20.0
10.5	2635 30	2574 31 1420	2542 33 1458	2509 34 1491	2474 35 1526	2438 37 1562	2401 38 1599	19.5
11.0	2635 41	2593 43 1407	2550 44 1450	2504 46 1496	2458 47 1542	2410 48 1590	2362 49 1638	19.0
11.5	2633 53	2580 55 1420	2524 56 1476	2467 57 1533	2409 58 1591	2350 60 1650	2290 60 1710	18.5
12.0	2598 65	2532 66 1468	2465 67 1535	2397 68 1603	2328 69 1672	2258 70 1742	2188 71 1812	18.0
12.5	2528 75	2452 77 1548	2375 78 1625	2297 78 1703	2218 79 1782	2138 80 1862	2058 80 1942	17.5
13.0	2428 84	2342 85 1658	2257 86 1743	2170 87 1830	2083 87 1917	1996 87 2004	1909 87 2091	17.0
13.5	2301 91	2209 92 1791	2116 92 1884	2024 93 1976	1931 93 2069	1838 92 2162	1746 92 2254	16.5
14.0	2155 96	2059 96 1941	1963 96 2037	1867 96 2133	1771 96 2229	1676 95 2324	1582 94 2418	16.0
14.5	2000 97	1903 97 2097	1806 97 2194	1709 96				

TABLE 4 (cont.).

Vert. Arg. D.

Hor. Arg. 4.

Arg.	7 v 69	8 v 70	9 v 71	10 v 72	11 v 73	12 v 74	13 v 75	Arg.
d								d
-0.5	2868 - 86 1132	2780 - 88 1220	2691 - 90 1309	2600 - 92 1400	2508 - 93 1492	2414 - 94 1586	2319 - 95 1681	30.5
0.0	2741 92 1259	2648 93 1352	2554 95 1446	2458 96 1542	2362 97 1638	2264 98 1736	2165 99 1835	30.0
+0.5	2589 94 1411	2493 96 1507	2397 97 1603	2300 98 1700	2202 98 1798	2103 99 1897	2004 99 1996	29.5
1.0	2420 94 1580	2326 95 1674	2230 96 1770	2134 96 1866	2038 96 1962	1942 96 2058	1845 96 2155	29.0
1.5	2248 91 1752	2157 91 1843	2065 92 1935	1974 92 2026	1882 91 2118	1791 91 2209	1700 90 2300	28.5
2.0	2082 85 1918	1997 85 2003	1912 85 2088	1828 84 2172	1743 84 2257	1660 83 2340	1577 82 2423	28.0
2.5	1932 76 2068	1856 76 2144	1780 76 2220	1705 75 2295	1630 74 2370	1556 73 2444	1484 72 2516	27.5
3.0	1808 66 2192	1741 66 2259	1676 65 2324	1611 64 2389	1548 63 2452	1485 62 2515	1424 61 2576	27.0
3.5	1713 55 2287	1658 54 2342	1604 53 2396	1551 52 2449	1499 51 2501	1449 50 2551	1400 48 2600	26.5
4.0	1652 44 2348	1609 43 2391	1567 42 2433	1526 40 2474	1486 39 2514	1447 38 2553	1410 36 2590	26.0
4.5	1625 32 2375	1593 31 2407	1563 30 2437	1533 29 2467	1505 28 2495	1478 26 2522	1452 25 2548	25.5
5.0	1631 22 2369	1610 21 2390	1590 19 2410	1571 18 2429	1553 17 2447	1536 16 2464	1520 15 2480	25.0
5.5	1665 12 2335	1654 11 2346	1643 10 2357	1633 9 2367	1624 8 2376	1616 7 2384	1609 - 6 2391	24.5
6.0	1725 - 4 2275	1721 - 3 2279	1718 - 3 2282	1715 - 2 2285	1714 - 1 2286	1712 - 1 2288	1712 0 2288	24.0
6.5	1803 + 2 2197	1805 + 2 2195	1807 + 3 2193	1810 + 3 2190	1814 + 4 2186	1818 + 4 2182	1822 + 5 2178	23.5
7.0	1895 5 2105	1900 6 2100	1906 6 2094	1912 6 2088	1918 6 2082	1925 7 2075	1932 7 2068	23.0
7.5	1993 7 2007	2000 7 2000	2007 7 1993	2014 7 1986	2021 7 1979	2028 7 1972	2035 7 1965	22.5
8.0	2092 6 1908	2098 6 1902	2104 6 1896	2110 5 1890	2115 5 1885	2120 5 1880	2125 + 5 1875	22.0
8.5	2185 + 3 1815	2188 + 3 1812	2190 + 2 1810	2192 + 2 1808	2194 + 1 1806	2195 + 1 1805	2196 0 1804	21.5
9.0	2266 - 2 1734	2264 - 2 1736	2261 - 3 1739	2257 - 4 1743	2253 - 4 1747	2248 - 5 1752	2243 - 6 1757	21.0
9.5	2329 9 1671	2319 10 1681	2309 11 1691	2298 11 1702	2286 12 1714	2274 13 1726	2261 13 1739	20.5
10.0	2369 18 1631	2350 19 1650	2332 19 1668	2312 20 1688	2291 21 1709	2270 22 1730	2248 22 1752	20.0
10.5	2381 28 1619	2353 29 1647	2324 30 1676	2294 30 1706	2262 31 1737	2232 32 1768	2200 32 1800	19.5
11.0	2363 39 1637	2324 40 1676	2284 40 1716	2244 41 1756	2202 42 1798	2160 42 1840	2118 42 1882	19.0
11.5	2313 50 1687	2262 51 1738	2211 51 1789	2160 52 1840	2108 52 1892	2056 52 1944	2004 52 1996	18.5
12.0	2230 61 1770	2169 62 1831	2107 62 1893	2045 62 1955	1983 62 2017	1921 62 2079	1859 62 2141	18.0
12.5	2117 71 1883	2046 71 1954	1974 71 2026	1903 71 2097	1832 71 2168	1761 70 2239	1691 70 2309	17.5
13.0	1979 80 2021	1899 80 2101	1819 79 2181	1740 79 2260	1661 78 2339	1584 77 2416	1507 76 2493	17.0
13.5	1822 87 2178	1735 86 2265	1650 85 2350	1565 84 2435	1481 83 2519	1398 82 2602	1318 80 2682	16.5
14.0	1655 91 2345	1564 90 2436	1475 89 2525	1387 87 2613	1300 86 2700	1216 84 2784	1133 82 2867	16.0
14.5	1489 93 2511	1396 91 2604	1306 89 2694	1218 88 2782	1131 85 2869	1047 83 2953	965 81 3035	15.5
15.0	1333 91 2667	1242 89 2758	1154 87 2846	1067 85 2933	984 83 3016	902 80 3098	824 77 3176	15.0
15.5	1198 87 2802	1111 85 2889	1028 83 2972	946 80 3054	868 77 3132	792 74 3208	719 71 3281	14.5
16.0	1091 80 2909	1012 78 2988	935 75 3065	861 72 3139	790 70 3210	722 66 3278	657 63 3343	14.0
16.5	1020 72 2980	950 69 3050	882 66 3118	817 63 3183	755 60 3245	697 57 3303	641 53 3359	13.5
17.0	988 61 3012	928 59 3072	871 56 3129	816 53 3184	765 50 3235	717 47 3283	674 43 3328	13.0
17.5	996 50 3004	947 48 3053	901 45 3099	858 42 3142	818 39 3182	780 36 3220	746 33 3254	12.5
18.0	1042 39 2958	1004 36 2996	970 34 3030	938 31 3062	908 28 3092	881 25 3119	857 22 3143	12.0
18.5	1122 28 2878	1095 25 2905	1071 23 2929	1049 20 2951	1030 18 2970	1013 15 2987	999 13 3001	11.5
19.0	1228 17 2772	1212 15 2788	1198 13 2802	1185 11 2815	1175 9 2825	1167 - 7 2833	1161 - 5 2839	11.0
19.5	1355 8 2645	1347 - 7 2653	1341 - 5 2659	1337 - 3 2663	1334 - 2 2666	1334 0 2666	1335 + 2 2665	10.5
20.0	1494 - 1 2506	1493 0 2507	1494 + 1 2506	1496 + 3 2504	1499 + 4 2501	1504 + 5 2496	1510 6 2490	10.0
20.5	1636 + 4 2364	1641 + 5 2359	1646 6 2354	1653 7 2347	1660 8 2340	1668 9 2332	1677 9 2323	9.5
21.0	1775 7 2225	1782 8 2218	1791 8 2209	1800 9 2200	1809 9 2191	1818 10 2182	1829 10 2171	9.0
21.5	1902 9 2098	1911 9 2089	1920 9 2080	1929 9 2071	1938 9 2062	1948 10 2052	1957 10 2043	8.5
22.0	2011 8 1989	2019 8 1981	2026 8 1974	2034 8 1966	2042 8 1958	2049 7 1951	2056 7 1944	8.0
22.5	2095 5 1905	2100 + 5 1900	2105 + 5 1895	2110 + 4 1890	2114 + 4 1886	2118 + 4 1882	2121 + 3 1879	7.5
23.0	2150 + 1 1850	2151 0 1849	2151 0 1849	2150 0 1850	2150 - 1 1850	2149 - 1 1851	2147 - 2 1853	7.0
23.5	2171 - 5 1829	2165 - 6 1835	2160 - 6 1840	2153 - 6 1847	2147 7 1853	2140 7 1860	2132 8 1868	6.5
24.0	2154 12 1846	2142 13 1858	2129 13 1871	2116 13 1884	2102 14 1898	2088 14 1912	2074 14 1926	6.0
24.5	2098 20 1902	2078 20 1922	2058 21 1942	2037 21 1963	2016 21 1984	1995 21 2005	1974 21 2026	5.5
25.0	2003 29 1997	1975 29 2025	1946 28 2054	1918 28 2082	1890 28 2110	1862 28 2138	1834 27 2166	5.0
25.5	1870 37 2130	1833 36 2203	1797 36 2274	1761 35 2349	1726 35 2424	1692 34 2500	1658 33 2576	4.5
26.0	1702 45 2298	1658 44 2371	1615 43 2448	1572 42 2528	1531 41 2609	1491 39 2694	1452 38 2784	4.0
26.5	1507 51 2493	1456 50 2564	1407 49 2639	1359 47 2714	1312 45 2792	1268 43 2874	1226 42 2964	3.5
27.0	1292 57 2708	1236 55 2784	1182 53 2861	1130 51 2940	1081 48 2999	1034 46 2966	989 43 3011	3.0
27.5	1068 60 2932	1008 58 2992	952 55 3048	898 52 3102	847 50 3153	799 47 3201	754 43 3246	2.5
28.0	848 62 3152	787 58 3213	730 55 3270	677 52 3323	626 49 3374	579 45 3421	536 41 3464	2.0
28.5	645 61 3355	586 57 3414	530 53 3470	479 50 3521	431 46 3569	388 42 3612	348 37 3652	1.5
29.0	472 57 3528	416 53 3584	365 49 3635	318 45 3682	275 41 3725	236 36 3764	202 32 3798	1.0
29.5	341 52 3659	290 48 3710	245 43 3755	204 39 3796	167 34 3833	135 29 3865	108 25 3892	+0.5
30.0	260 45 3740	217 40 3783	179 36 3821	145 31 3855	116 26 3884	92 22 3908	73 17 3927	0.0
30.5	235 - 37 3765	201 - 32 3799	171 - 27 3829	146 - 23 3854	125 - 18 3875	110 - 13 3890	99 - 8 3901	-0.5
Arg.	55 v 117	54 v 116	53 v 115	52 v 114	51 v 113	50 v 112	49 v 111	Arg.

TABLE 4 (cont.).

Vert. Arg. D.

Hor. Arg. 4.

Arg.	14 v 76	15 v 77	16 v 78	17 v 79	18 v 80	19 v 81	20 v 82	Arg.
d								d
-0.5	2223 - 96 1777	2127 - 96 1873	2030 - 97 1970	1934 - 97 2066	1837 - 96 2163	1741 - 96 2259	1646 - 95 2354	30.5
0.0	2066 99 1934	1967 99 2033	1868 99 2132	1770 98 2230	1672 98 2328	1575 97 2425	1479 95 2521	30.0
+0.5	1905 99 2095	1806 98 2194	1708 98 2292	1611 97 2389	1514 96 2486	1419 94 2581	1325 93 2675	29.5
1.0	1749 96 2251	1654 95 2346	1560 94 2440	1467 93 2533	1375 91 2625	1284 89 2716	1196 87 2804	29.0
1.5	1610 90 2390	1521 88 2479	1433 87 2567	1347 85 2653	1262 84 2738	1180 82 2820	1099 79 2901	28.5
2.0	1495 81 2505	1415 80 2585	1336 78 2664	1259 76 2741	1184 74 2816	1111 72 2889	1040 70 2960	28.0
2.5	1412 70 2588	1342 69 2658	1274 67 2726	1208 65 2792	1144 63 2856	1082 61 2918	1022 58 2978	27.5
3.0	1364 59 2636	1306 57 2694	1250 55 2750	1195 53 2805	1143 51 2857	1093 49 2907	1045 47 2955	27.0
3.5	1352 47 2648	1306 45 2694	1262 43 2738	1219 41 2781	1179 39 2821	1141 37 2859	1105 35 2895	26.5
4.0	1374 35 2626	1340 34 2660	1308 32 2692	1277 30 2723	1249 28 2751	1222 26 2778	1197 24 2803	26.0
4.5	1427 24 2573	1404 22 2596	1383 21 2617	1363 19 2637	1345 17 2655	1329 16 2671	1314 14 2686	25.5
5.0	1506 14 2494	1493 12 2507	1481 11 2519	1471 10 2529	1462 8 2538	1454 - 7 2546	1448 - 6 2552	25.0
5.5	1603 - 5 2397	1598 - 4 2402	1595 - 3 2405	1592 - 2 2408	1590 - 1 2410	1589 0 2411	1589 + 1 2411	24.5
6.0	1713 + 1 2287	171						

TABLE 4 (cont.).

Vert. Arg. D.

Hor. Arg. 4.

Arg.	21 v 83	22 v 84	23 v 85	24 v 86	25 v 87	26 v 88	27 v 89	Arg.
d								d
-0.5	1551-94 2449	1458-93 2542	1366-91 2634	1276-89 2724	1187-87 2813	1101-85 2899	1017-83 2983	30.5
0.0	1384 94 2616	1291 92 2709	1199 90 2801	1110 88 2890	1023 86 2977	939 83 3061	857 80 3143	30.0
+0.5	1233 91 2767	1143 89 2857	1056 87 2944	970 84 3030	888 81 3112	808 78 3192	731 75 3269	29.5
1.0	1110 85 2890	1026 83 2974	944 80 3056	865 77 3135	789 74 3211	716 71 3284	647 68 3353	29.0
1.5	1021 77 2979	945 74 3055	872 72 3128	802 69 3198	735 65 3265	671 62 3329	610 59 3390	28.5
2.0	972 67 3028	906 64 3094	843 61 3157	783 58 3217	726 55 3274	673 52 3327	623 48 3377	28.0
2.5	965 56 3035	911 53 3089	859 50 3141	810 47 3190	765 44 3235	722 41 3278	683 37 3317	27.5
3.0	1000 44 3000	957 41 3043	917 39 3083	880 36 3120	845 33 3155	814 30 3186	785 27 3215	27.0
3.5	1071 33 2929	1040 30 2960	1012 28 2988	985 25 3015	961 22 3039	940 20 3060	922 17 3078	26.5
4.0	1174 22 2826	1154 20 2846	1135 17 2865	1119 15 2881	1105 13 2895	1094 10 2906	1084 8 2916	26.0
4.5	1301 12 2699	1290 10 2710	1280 8 2720	1273 - 7 2727	1267 - 5 2733	1263 - 3 2737	1262 - 1 2738	25.5
5.0	1443 - 4 2557	1439 - 3 2561	1437 - 1 2563	1437 0 2563	1438 + 2 2562	1440 + 3 2560	1444 + 4 2556	25.0
5.5	1591 + 2 2499	1593 + 3 2497	1596 + 4 2494	1601 + 5 2399	1606 6 2394	1613 7 2387	1620 8 2380	24.5
6.0	1737 6 2263	1743 6 2257	1750 7 2250	1757 8 2243	1765 8 2235	1774 9 2226	1783 10 2217	24.0
6.5	1872 8 2128	1880 8 2120	1888 8 2112	1897 9 2103	1906 9 2094	1914 9 2086	1924 9 2076	23.5
7.0	1990 8 2010	1998 8 2002	2006 8 1994	2013 8 1987	2021 8 1979	2028 8 1972	2036 7 1964	23.0
7.5	2085 6 1915	2090 5 1910	2096 5 1904	2100 5 1900	2105 + 5 1895	2110 + 4 1890	2114 + 4 1886	22.5
8.0	2150 + 2 1850	2152 + 1 1848	2153 + 1 1847	2154 + 1 1846	2154 0 1846	2154 0 1846	2154 - 1 1846	22.0
8.5	2182 - 4 1818	2178 - 4 1822	2174 - 4 1826	2170 - 5 1830	2164 - 5 1836	2159 - 6 1841	2153 6 1847	21.5
9.0	2178 10 1822	2168 11 1832	2157 11 1843	2146 11 1854	2134 12 1866	2122 12 1878	2110 12 1890	21.0
9.5	2135 18 1865	2117 18 1883	2099 18 1901	2081 18 1919	2062 19 1938	2044 19 1956	2025 19 1975	20.5
10.0	2053 26 1947	2027 26 1973	2002 26 1998	1976 26 2024	1950 26 2050	1925 25 2075	1900 25 2100	20.0
10.5	1933 34 2067	1900 33 2100	1866 33 2134	1833 33 2167	1801 32 2199	1769 32 2231	1738 31 2262	19.5
11.0	1779 41 2221	1738 41 2262	1698 40 2302	1658 39 2342	1620 38 2380	1582 37 2418	1545 36 2455	19.0
11.5	1596 48 2404	1548 47 2452	1502 46 2498	1457 45 2543	1413 43 2587	1370 41 2630	1330 40 2670	18.5
12.0	1391 54 2609	1338 52 2662	1286 50 2714	1237 49 2763	1189 47 2811	1144 44 2856	1101 42 2899	18.0
12.5	1174 58 2826	1117 56 2883	1062 53 2938	1010 51 2990	961 48 3039	914 45 3086	870 43 3130	17.5
13.0	956 60 3044	897 57 3103	841 54 3159	789 51 3211	739 48 3261	692 45 3308	649 41 3351	17.0
13.5	750 60 3250	691 57 3309	636 53 3364	585 50 3415	537 46 3463	493 42 3507	453 38 3547	16.5
14.0	568 58 3432	512 54 3488	460 50 3540	412 46 3588	368 42 3632	328 38 3672	292 33 3708	16.0
14.5	421 53 3579	370 49 3630	323 45 3677	280 41 3720	241 36 3759	207 32 3793	178 27 3822	15.5
15.0	320 47 3680	275 43 3725	234 38 3766	198 34 3802	166 29 3834	140 24 3860	118 20 3882	15.0
15.5	271 40 3729	233 35 3767	200 31 3800	172 26 3828	148 22 3852	130 17 3870	116 12 3884	14.5
16.0	276 31 3724	247 27 3753	223 22 3777	203 18 3797	188 13 3812	177 - 8 3823	171 - 3 3829	14.0
16.5	335 22 3665	315 18 3685	299 13 3701	288 9 3712	281 - 5 3719	279 0 3721	281 + 4 3719	13.5
17.0	443 13 3557	432 9 3568	425 - 5 3575	422 - 1 3578	423 + 3 3577	428 + 7 3572	437 11 3563	13.0
17.5	594 - 5 3406	591 - 1 3409	591 + 2 3409	595 + 6 3405	603 10 3397	614 13 3386	629 17 3371	12.5
18.0	776 + 2 3224	780 + 5 3220	787 9 3213	797 12 3203	810 15 3190	826 18 3174	846 21 3154	12.0
18.5	980 8 3020	989 11 3011	1001 13 2999	1015 16 2985	1032 18 2968	1052 21 2948	1074 23 2926	11.5
19.0	1192 12 2808	1205 14 2795	1221 16 2779	1238 18 2762	1257 20 2743	1279 22 2721	1302 24 2698	11.0
19.5	1402 15 2598	1418 16 2582	1435 18 2565	1453 19 2547	1473 21 2527	1495 22 2505	1517 23 2483	10.5
20.0	1600 16 2400	1616 17 2384	1634 18 2366	1652 19 2348	1671 20 2329	1691 20 2309	1712 21 2288	10.0
20.5	1777 15 2223	1792 16 2208	1808 16 2192	1824 17 2176	1841 17 2159	1858 17 2142	1876 18 2124	9.5
21.0	1924 13 2076	1937 13 2063	1950 13 2050	1964 13 2036	1977 13 2023	1991 14 2009	2004 14 1996	9.0
21.5	2036 10 1964	2046 10 1954	2055 10 1945	2065 9 1935	2074 9 1926	2083 9 1917	2092 9 1908	8.5
22.0	2108 6 1892	2114 + 5 1886	2119 + 5 1881	2124 + 5 1876	2128 + 4 1872	2132 + 4 1868	2136 + 4 1864	8.0
22.5	2138 + 1 1862	2138 0 1862	2138 0 1862	2138 0 1862	2138 - 1 1862	2137 - 1 1863	2136 - 1 1864	7.5
23.0	2122 - 4 1878	2118 - 4 1882	2113 - 5 1887	2108 - 5 1892	2102 6 1898	2096 6 1904	2091 6 1909	7.0
23.5	2062 10 1938	2053 10 1947	2043 10 1957	2033 10 1967	2023 10 1977	2013 10 1987	2003 10 1997	6.5
24.0	1959 15 2041	1944 14 2036	1930 14 2030	1916 14 2024	1902 14 2018	1889 14 2011	1876 13 2124	6.0
24.5	1815 19 2185	1796 18 2204	1779 18 2221	1761 17 2239	1745 16 2255	1729 16 2271	1713 15 2287	5.5
25.0	1635 22 2365	1614 21 2386	1594 20 2406	1575 19 2425	1556 18 2444	1540 16 2460	1524 15 2476	5.0
25.5	1428 24 2572	1404 22 2596	1383 21 2617	1363 19 2637	1345 17 2655	1329 16 2671	1314 14 2686	4.5
26.0	1200 24 2800	1177 22 2823	1156 20 2844	1138 18 2862	1121 15 2879	1107 13 2893	1095 11 2905	4.0
26.5	965 23 3035	943 20 3057	924 17 3076	909 14 3091	896 12 3104	885 9 3115	878 - 6 3122	3.5
27.0	733 20 3267	715 16 3285	700 13 3300	688 10 3312	680 - 6 3320	676 - 3 3324	674 0 3326	3.0
27.5	518 15 3482	505 11 3495	495 - 7 3505	490 - 3 3510	489 0 3511	491 + 4 3509	497 + 8 3503	2.5
28.0	333 9 3667	326 - 4 3674	324 0 3676	326 + 4 3674	332 + 8 3668	343 13 3657	358 17 3642	2.0
28.5	191 - 1 3809	192 + 3 3808	198 + 8 3802	208 13 3792	223 17 3777	242 22 3758	266 26 3734	1.5
29.0	101 + 7 3809	111 12 3889	125 16 3875	144 21 3856	167 26 3833	196 31 3804	229 35 3771	1.0
29.5	70 15 3930	88 20 3912	110 25 3890	138 30 3862	170 34 3830	207 39 3793	248 44 3752	+0.5
30.0	100 23 3900	126 28 3874	156 33 3844	191 38 3809	231 42 3769	276 46 3724	324 51 3676	0.0
30.5	189 + 30 3811	222 + 35 3778	259 + 39 3741	301 + 44 3699	347 + 48 3653	397 + 52 3603	452 + 56 3548	-0.5
Arg.	41 v 103	40 v 102	39 v 101	38 v 100	37 v 99	36 v 98	35 v 97	Arg.

TABLE 4 (concl.).

Vert. Arg. D.

Hor. Arg. 4.

Arg.	28 v 90	29 v 91	30 v 92	31 v 93	Arg.
d					d
-0.5	935-80 3065	856-77 3144	781-74 3219	708-71 3292	30.5
0.0	778 77 3222	702 74 3298	630 71 3370	561 67 3439	30.0
+0.5	657 72 3343	587 68 3413	521 65 3479	458 61 3542	29.5
1.0	581 64 3419	518 61 3482	460 57 3540	405 53 3595	29.0
1.5	554 55 3446	500 51 3500	451 47 3549	406 43 3594	28.5
2.0	576 45 3424	533 41 3467	494 37 3506	459 33 3541	28.0
2.5	647 34 3353	615 31 3385	586 27 3414	561 23 3439	27.5
3.0	760 23 3240	738 21 3262	719 17 3281	703 14 3297	27.0
3.5	906 14 3094	894 11 3106	884 8 3116	877 - 6 3123	26.5
4.0	1077 - 6 2923	1073 - 3 2927	1070 - 1 2930	1071 + 1 2929	26.0
4.5	1262 + 1 2738	1263 + 3 2737	1267 + 5 2733	1273 7 2727	25.5
5.0	1449 6 2551	1455 7 2545	1463 9 2537	1473 10 2527	25.0
5.5	1629 9 2371	1638 10 2362	1649 11 2351	1660 12 2340	24.5
6.0	1793 10 2207	1804 11 2196	1814 11 2186	1826 12 2174	24.0
6.5	1933 10 2067	1943 10 2057	1953 10 2047	1962 10 2038	23.5
7.0	2043 7 1957	2050 7 1950	2058 7 1942	2064 7 1936	23.0
7.5	2118 + 4 1882	2121 + 3 1879	2124 + 3 1876	2127 + 3 1873	22.5
8.0	2153 - 1 1847	2151 - 1 1849	2150 - 2 1850	2148 - 2 1852	22.0
8.5	2146 7 1854	2140 7 1860	2132 7 1868	2125 8 1875	21.5
9.0	2097 13 1903	2084 13 1916	2072 13 1928	2058 13 1942	21.0
9.5	2006 19 1994	1987 19 2013	1968 19 2032	1949 19 2051	20.5
10.0	1874 25 2126	1850 25 2150	1825 24 2175	1802 24 2198	20.0
10.5	1707 30 2293	1677 29 2323	1		

TABLE 5.

Vert. Arg. D.

Hor. Arg. 5.

Arg.	0 v	1 v 65	2 v 66	3 v 67	4 v 68	5 v 69	6 v 70	Arg.
d								d
-0.5	671 + 37	708 + 38 1692	746 + 39 1654	786 + 40 1614	827 + 41 1573	868 + 42 1532	910 + 43 1490	30.5
0.0	903 42	946 43 1454	989 44 1411	1033 44 1367	1077 44 1323	1122 45 1278	1167 45 1233	30.0
+0.5	1159 45	1204 45 1196	1249 45 1151	1294 45 1106	1338 44 1062	1382 44 1018	1426 43 974	29.5
1.0	1418 44	1462 43 938	1504 42 896	1546 42 854	1588 41 812	1628 40 772	1667 39 733	29.0
1.5	1661 39	1700 38 700	1737 37 663	1773 35 627	1808 34 592	1841 33 559	1873 31 527	28.5
2.0	1871 32	1902 30 498	1931 28 469	1958 27 442	1984 25 416	2008 23 392	2030 21 370	28.0
2.5	2034 22	2055 20 345	2074 18 326	2091 16 309	2106 14 294	2118 + 12 282	2129 + 9 271	27.5
3.0	2143 + 11	2153 + 9 247	2161 + 7 239	2166 + 4 234	2169 + 2 231	2170 0 230	2169 - 3 231	27.0
3.5	2196 0	2195 - 3 205	2191 - 5 209	2185 - 7 215	2176 - 10 224	2165 - 12 235	2152 14 248	26.5
4.0	2197 - 12	2185 14 215	2169 16 231	2152 19 248	2132 21 268	2110 23 290	2086 25 314	26.0
4.5	2153 22	2130 24 270	2104 27 296	2076 29 324	2047 31 353	2015 33 385	1981 35 419	25.5
5.0	2031 31	2009 33 361	1980 35 396	1948 37 432	1913 39 470	1876 41 510	1836 42 552	25.0
5.5	1962 39	1922 41 478	1880 42 520	1837 44 563	1792 46 608	1746 47 654	1698 48 702	24.5
6.0	1833 45	1787 47 613	1740 48 660	1691 49 709	1641 50 759	1590 51 810	1538 52 862	24.0
6.5	1692 50	1641 51 759	1590 52 810	1537 53 863	1483 54 917	1429 54 971	1375 55 1025	23.5
7.0	1542 53	1488 54 912	1434 55 966	1379 55 1021	1323 56 1077	1268 56 1132	1212 56 1188	23.0
7.5	1387 55	1332 56 1068	1276 56 1124	1220 56 1180	1164 56 1236	1108 56 1292	1052 55 1348	22.5
8.0	1228 56	1172 56 1228	1117 56 1283	1061 55 1339	1006 55 1394	951 54 1449	897 54 1503	22.0
8.5	1068 55	1013 55 1387	959 54 1441	905 53 1495	852 53 1548	800 52 1600	749 51 1651	21.5
9.0	908 53	855 52 1545	804 51 1596	753 50 1647	704 49 1696	656 48 1744	609 46 1791	21.0
9.5	751 49	703 48 1697	655 47 1745	609 45 1791	565 44 1835	522 42 1878	481 40 1919	20.5
10.0	603 43	560 42 1840	519 40 1881	480 39 1920	442 37 1958	406 35 1994	372 33 2028	20.0
10.5	472 36	436 34 1964	403 33 1997	371 31 2029	341 29 2059	314 26 2086	288 24 2112	19.5
11.0	366 27	340 25 2060	315 23 2085	293 21 2107	273 19 2127	255 17 2145	239 14 2161	19.0
11.5	296 17	280 15 2120	266 13 2134	254 10 2146	245 8 2155	238 6 2162	233 4 2167	18.5
12.0	272 - 6	267 - 4 2133	264 - 1 2136	264 + 1 2136	266 + 3 2134	270 + 5 2130	277 + 8 2123	18.0
12.5	301 + 6	308 + 8 2092	317 + 10 2083	328 12 2072	341 14 2059	356 16 2044	374 18 2026	17.5
13.0	388 17	406 19 1994	425 21 1975	447 23 1953	471 24 1929	496 26 1904	523 28 1877	17.0
13.5	531 27	558 28 1842	588 30 1812	619 31 1781	651 33 1749	684 34 1716	719 35 1681	16.5
14.0	723 35	758 36 1642	794 37 1606	832 38 1568	870 39 1530	909 40 1491	949 40 1451	16.0
14.5	952 40	992 41 1408	1032 41 1368	1073 41 1327	1115 42 1285	1156 42 1244	1198 42 1202	15.5
15.0	1200 42	1242 42 1158	1283 41 1117	1324 41 1076	1365 41 1035	1406 40 994	1446 40 954	15.0
15.5	1448 40	1488 39 912	1527 38 873	1565 38 835	1602 37 798	1638 36 762	1673 35 727	14.5
16.0	1677 35	1711 34 689	1744 32 656	1776 31 624	1806 30 594	1835 28 565	1862 26 538	14.0
16.5	1869 27	1895 25 505	1920 24 480	1943 22 457	1963 20 437	1982 18 418	2000 16 400	13.5
17.0	2012 17	2028 15 372	2042 13 358	2054 + 11 346	2064 + 9 336	2072 + 7 328	2078 + 5 322	13.0
17.5	2099 + 6	2104 + 4 296	2106 + 1 294	2106 - 1 294	2104 - 3 296	2100 - 5 300	2094 - 7 306	12.5
18.0	2128 - 6	2121 - 8 279	2112 - 10 288	2100 12 300	2087 15 313	2071 17 329	2053 19 347	12.0
18.5	2104 17	2086 19 314	2065 21 335	2043 23 357	2018 25 382	1992 27 408	1963 29 437	11.5
19.0	2034 27	2006 29 394	1975 31 425	1943 33 457	1909 35 491	1873 37 527	1836 38 564	11.0
19.5	1928 36	1891 38 509	1852 40 548	1812 41 588	1770 43 630	1727 44 673	1682 45 718	10.5
20.0	1797 43	1753 45 647	1707 46 693	1660 47 740	1612 48 788	1564 49 836	1514 50 886	10.0
20.5	1649 49	1600 50 800	1549 51 851	1498 52 902	1446 52 954	1393 53 1007	1340 53 1060	9.5
21.0	1492 53	1439 53 961	1385 54 1015	1331 54 1069	1277 54 1123	1222 55 1178	1168 55 1232	9.0
21.5	1332 55	1277 55 1123	1222 55 1178	1166 55 1234	1111 55 1289	1056 55 1344	1001 54 1399	8.5
22.0	1172 56	1116 56 1284	1060 55 1340	1005 55 1395	950 54 1450	896 54 1504	843 53 1557	8.0
22.5	1013 55	958 55 1442	904 54 1496	850 53 1550	797 52 1603	745 51 1655	694 50 1706	7.5
23.0	858 53	805 52 1595	753 51 1647	702 50 1698	653 49 1747	604 48 1796	557 46 1843	7.0
23.5	708 50	659 49 1741	611 47 1789	564 46 1836	519 44 1881	475 43 1925	433 41 1967	6.5
24.0	567 45	522 44 1878	479 42 1921	438 40 1962	399 38 2001	361 36 2039	326 34 2074	6.0
24.5	438 39	400 37 2000	363 35 2037	329 33 2071	297 31 2103	267 29 2133	239 27 2161	5.5
25.0	329 31	298 29 2102	270 27 2130	244 25 2156	221 22 2179	200 20 2200	181 17 2219	5.0
25.5	247 22	226 20 2174	208 17 2192	192 15 2208	178 13 2222	166 - 10 2234	158 - 8 2242	4.5
26.0	203 - 12	192 - 9 2208	184 - 7 2216	179 - 4 2221	176 - 2 2224	175 + 1 2225	177 + 3 2223	4.0
26.5	204 0	205 + 2 2195	208 + 4 2192	213 + 7 2187	221 + 9 2179	232 12 2168	245 14 2155	3.5
27.0	257 + 11	269 13 2131	284 16 2116	301 18 2099	320 20 2080	341 22 2059	364 24 2036	3.0
27.5	366 22	390 24 2010	415 26 1985	442 28 1958	470 30 1930	501 31 1899	533 33 1867	2.5
28.0	529 32	562 33 1838	596 35 1804	631 36 1769	668 38 1732	706 39 1694	746 40 1654	2.0
28.5	739 39	778 40 1622	819 41 1581	861 42 1539	903 43 1497	946 43 1454	990 44 1410	1.5
29.0	982 44	1026 44 1334	1070 44 1330	1114 45 1286	1159 45 1241	1204 45 1196	1249 45 1151	1.0
29.5	1241 45	1286 45 1114	1330 44 1070	1374 44 1026	1418 43 982	1461 43 939	1504 42 896	+0.5
30.0	1497 42	1539 42 861	1580 41 820	1620 40 780	1659 39 741	1697 38 703	1734 36 666	0.0
30.5	1729 + 37	1765 + 35 635	1800 + 34 600	1833 + 32 567	1865 + 31 535	1895 + 29 505	1923 + 28 477	-0.5
Arg.	64 v	63 v 127	62 v 126	61 v 125	60 v 124	59 v 123	58 v 122	Arg.

TABLE 5 (cont.).

Vert. Arg. D.

Hor. Arg. 5.

Arg.	7 v 71	8 v 72	9 v 73	10 v 74	11 v 75	12 v 76	13 v 77	Arg.
d								d
-0.5	953 + 43 1447	997 + 44 1403	1041 + 44 1359	1085 + 45 1315	1130 + 45 1270	1175 + 45 1225	1220 + 45 1180	30.5
0.0	1211 45 1189	1256 45 1144	1301 44 1099	1345 44 1055	1389 44 1011	1433 43 967	1476 43 924	30.0
+0.5	1469 43 931	1511 42 889	1553 41 847	1594 40 806	1634 39 766	1673 38 727	1710 37 690	29.5
1.0	1705 37 695	1742 36 658	1777 35 623	1811 33 589	1844 32 556	1875 30 525	1905 29 495	29.0
1.5	1903 29 497	1931 27 469	1958 26 442	1983 24 417	2006 22 394	2026 20 374	2045 18 355	28.5
2.0	2050 19 350	2067 17 333	2083 15 317	2096 + 13 304	2108 + 10 292	2117 + 8 283	2124 + 6 276	28.0
2.5	2137 + 7 203	2143 + 5 257	2147 + 2 253	2148 0 252	2147 - 2 253	2144 - 4 256	2138 - 7 262	27.5
3.0	2165 - 5 235	2158 - 7 242	2150 - 10 250	2139 - 12 261	2126 14 274	2111 16 289	2093 19 307	27.0
3.5	2136 17 204	2118 19 282	2098 21 302	2076 23 324	2051 25 349	2025 27 375	1996 29 404	26.5
4.0	2059 27 341	2031 29 369	2000 31 400	1968 33 432	1934 35 466	1898 37 502	1860 38 540	26.0
4.5	1946 37 454	1908 38 492	1869 40 531	1828 42 572	1786 43 614	1742 44 658	1697 46 703	25.5
5.0	1805 44 595	1761 45 639	1715 47 685	1668 48 732	1619 49 781	1570 50 830	1520 51 880	25.0
5.5	1649 49 751	1599 50 801	1548 51 852	1496 52 904	1444 53 956	1391 53 1009	1338 54 1062	24.5
6.0	1485 53 915	1432 54 968	1378 54 1022	1323 55 1077	1268 55 1132	1213 55 1187	1158 55 1242	24.0
6.5	1320 55 1080	1264 55 1136	1209 56 1191	1153 56 1247	1097 55 1303	1042 55 1358	987 55 1413	23.5
7.0	1156 56 1244	1100 56 1300	1045 55 1355	989 55 1411	935 54 1465	881 54 1519	828 53 1572	23.0
7.5	997 55 1403	942 55 1458	888 54 1512	834 53 1566	782 52 1618	730 51 1670	680 50 1720	22.5
8.0	844 53 1556	79						

TABLE 5 (cont.).

Vert. Arg. D.

Hor. Arg. 5.

Arg.	14 v 78	15 v 79	16 v 80	17 v 81	18 v 82	19 v 83	20 v 84	Arg.
<i>d</i>								<i>d</i>
-0.5	1264 +45 1136	1309 +45 1091	1354 +44 1046	1398 +44 1002	1441 +43 959	1484 +43 916	1527 +42 873	30.5
0.0	1518 42 882	1560 41 840	1600 40 800	1640 39 760	1679 38 721	1716 37 684	1753 36 647	30.0
+0.5	1747 36 653	1782 35 618	1816 33 584	1848 32 552	1879 30 521	1908 28 492	1935 27 465	29.5
1.0	1933 27 467	1959 25 441	1983 23 417	2005 21 395	2026 19 374	2044 17 356	2060 15 340	29.0
1.5	2062 16 338	2077 14 323	2090 +12 310	2101 +10 299	2109 +7 291	2115 +5 285	2119 +3 281	28.5
2.0	2129 +4 271	2131 +1 269	2132 -1 268	2130 -3 270	2126 -5 274	2119 -8 281	2110 -10 290	28.0
2.5	2131 -9 261	2121 -11 279	2109 13 291	2094 15 306	2078 18 322	2059 20 341	2038 22 362	27.5
3.0	2074 21 326	2052 23 348	2028 25 372	2002 27 398	1974 29 426	1945 30 455	1914 32 486	27.0
3.5	1966 31 434	1934 33 466	1900 35 500	1864 36 536	1827 38 573	1788 39 612	1748 41 652	26.5
4.0	1821 40 579	1780 41 620	1738 43 662	1694 44 706	1650 45 750	1604 46 796	1557 47 843	26.0
4.5	1651 47 749	1604 48 796	1555 49 845	1506 49 894	1457 50 943	1406 51 994	1355 51 1045	25.5
5.0	1468 51 932	1417 52 983	1365 52 1035	1312 53 1088	1259 53 1141	1206 53 1194	1153 53 1247	25.0
5.5	1284 54 1116	1230 54 1170	1175 54 1225	1121 54 1279	1068 54 1332	1014 53 1386	961 53 1439	24.5
6.0	1104 55 1296	1049 54 1351	995 54 1405	941 53 1459	888 53 1512	835 52 1565	784 51 1616	24.0
6.5	933 54 1467	879 53 1521	826 52 1574	774 51 1626	724 50 1676	674 49 1726	625 48 1775	23.5
7.0	775 52 1625	724 51 1676	674 50 1726	625 48 1775	577 47 1823	531 45 1869	486 44 1914	23.0
7.5	631 48 1769	583 47 1817	537 46 1863	492 44 1908	449 42 1951	408 40 1992	368 38 2032	22.5
8.0	501 44 1899	458 42 1942	416 40 1984	377 38 2023	340 36 2060	304 34 2096	271 32 2129	22.0
8.5	387 38 2013	350 36 2050	314 34 2086	281 32 2119	250 30 2150	222 28 2178	195 25 2205	21.5
9.0	292 32 2108	262 29 2138	234 27 2166	208 25 2192	184 22 2216	163 20 2237	144 17 2256	21.0
9.5	220 24 2180	198 21 2202	177 19 2223	160 17 2240	144 14 2256	132 11 2268	122 - 8 2278	20.5
10.0	177 15 2223	163 13 2237	152 -10 2248	143 - 8 2257	137 - 5 2263	133 - 2 2267	132 0 2268	20.0
10.5	168 - 5 2232	164 - 3 2236	162 0 2238	163 + 2 2237	160 + 5 2234	172 + 7 2228	181 +10 2219	19.5
11.0	200 + 5 2200	206 + 7 2194	215 +10 2185	225 12 2175	238 14 2162	254 17 2146	271 19 2129	19.0
11.5	279 15 2121	295 17 2105	313 19 2087	332 21 2067	356 23 2044	380 25 2020	406 27 1994	18.5
12.0	406 24 1994	431 26 1969	458 28 1942	487 30 1913	518 31 1882	550 33 1850	584 35 1816	18.0
12.5	579 32 1821	612 34 1788	646 35 1754	682 37 1718	720 38 1680	758 39 1642	797 40 1603	17.5
13.0	791 38 1609	830 39 1570	870 40 1530	910 41 1490	952 42 1448	993 42 1407	1036 42 1364	17.0
13.5	1030 42 1370	1072 42 1328	1114 42 1286	1157 42 1243	1199 42 1201	1242 42 1158	1284 42 1116	16.5
14.0	1281 42 1119	1322 42 1078	1364 41 1036	1405 41 995	1445 40 955	1485 40 915	1524 39 876	16.0
14.5	1523 39 877	1561 38 839	1598 37 802	1634 36 766	1670 35 730	1704 34 696	1737 32 663	15.5
15.0	1737 32 663	1769 31 631	1799 29 601	1828 28 572	1855 26 545	1880 25 520	1904 23 496	15.0
15.5	1907 23 493	1929 21 471	1949 20 451	1968 18 432	1985 16 415	2000 14 400	2013 +12 387	14.5
16.0	2019 +12 381	2030 +10 370	2039 + 8 361	2046 + 6 354	2051 + 4 349	2054 + 2 346	2054 0 346	14.0
16.5	2065 0 335	2064 - 2 336	2061 - 4 339	2056 - 6 344	2049 - 8 351	2039 -10 361	2028 -12 372	13.5
17.0	2047 -12 353	2034 14 366	2018 16 382	2001 18 399	1982 20 418	1961 22 439	1938 24 462	13.0
17.5	1969 24 431	1944 25 456	1918 27 482	1890 29 510	1860 30 540	1829 32 571	1796 34 604	12.5
18.0	1841 33 559	1806 35 594	1771 36 629	1734 38 666	1695 39 705	1656 40 744	1615 41 785	12.0
18.5	1676 41 724	1634 43 766	1591 44 809	1547 44 853	1503 45 897	1457 46 943	1411 46 989	11.5
19.0	1490 47 910	1442 48 958	1394 48 1006	1345 49 1055	1296 49 1104	1247 49 1153	1198 49 1202	11.0
19.5	1294 51 1106	1243 51 1157	1192 51 1208	1141 51 1259	1090 51 1310	1040 50 1360	990 50 1410	10.5
20.0	1100 52 1300	1048 52 1352	996 52 1404	945 51 1455	894 50 1506	844 49 1556	795 48 1605	10.0
20.5	915 52 1485	863 51 1537	813 50 1587	763 49 1637	714 48 1686	667 47 1733	620 45 1780	9.5
21.0	744 50 1656	695 49 1705	647 47 1753	600 46 1800	555 45 1845	511 43 1889	469 41 1931	9.0
21.5	591 47 1809	546 45 1854	501 43 1899	459 42 1941	418 40 1982	379 38 2021	342 36 2058	8.5
22.0	457 42 1943	416 40 1984	376 38 2024	339 36 2061	304 34 2096	270 32 2130	239 30 2161	8.0
22.5	342 37 2058	306 35 2094	272 33 2128	241 30 2159	212 28 2188	185 26 2215	161 23 2239	7.5
23.0	246 31 2154	217 28 2183	190 26 2210	165 23 2235	143 21 2257	123 18 2277	106 16 2294	7.0
23.5	173 23 2227	156 21 2250	131 18 2269	114 16 2286	99 13 2301	88 10 2312	79 - 8 2321	6.5
24.0	124 15 2276	110 13 2290	99 10 2301	90 - 7 2310	84 - 5 2316	81 - 2 2319	80 + 1 2320	6.0
24.5	105 - 6 2295	100 - 4 2300	97 - 1 2303	98 + 1 2302	100 + 4 2300	106 + 7 2294	114 9 2286	5.5
25.0	122 + 3 2278	126 + 5 2274	132 + 8 2268	142 11 2258	154 13 2246	168 16 2232	185 18 2215	5.0
25.5	178 13 2222	192 15 2208	208 17 2192	227 20 2173	248 22 2152	271 24 2129	296 27 2104	4.5
26.0	279 22 2121	302 24 2098	327 26 2073	355 28 2045	384 30 2016	416 32 1984	449 34 1951	4.0
26.5	426 31 1974	457 33 1943	491 34 1909	526 36 1874	563 38 1837	601 39 1799	641 40 1759	3.5
27.0	616 38 1784	654 39 1740	695 41 1705	736 42 1664	778 43 1622	822 44 1578	866 45 1534	3.0
27.5	842 43 1558	886 44 1514	930 45 1470	975 45 1425	1020 46 1380	1066 46 1334	1112 46 1288	2.5
28.0	1092 45 1308	1137 46 1263	1183 46 1217	1229 46 1171	1274 46 1126	1320 45 1080	1365 45 1035	2.0
28.5	1349 45 1051	1394 44 1006	1438 44 962	1481 43 919	1524 42 876	1566 42 834	1607 41 793	1.5
29.0	1595 41 805	1635 40 765	1674 38 726	1712 37 688	1748 36 652	1784 35 616	1818 33 582	1.0
29.5	1810 33 590	1842 32 558	1874 30 526	1903 29 497	1931 27 469	1957 25 443	1981 23 419	+0.5
30.0	1977 24 423	1999 22 401	2020 20 380	2039 18 361	2055 16 345	2070 14 330	2082 +11 318	0.0
30.5	2083 +12 317	2093 +10 307	2102 + 8 298	2108 + 5 292	2113 + 3 287	2115 + 1 285	2115 - 1 285	-0.5
Arg.	50 v 114	49 v 113	48 v 112	47 v 111	46 v 110	45 v 109	44 v 108	Arg.

TABLE 5 (cont.).

Vert. Arg. D.

Hor. Arg. 5.

Arg.	21 v 85	22 v 86	23 v 87	24 v 88	25 v 89	26 v 90	27 v 91	Arg.
<i>d</i>								<i>d</i>
-0.5	1568 +41 832	1609 +40 791	1648 +39 752	1687 +38 713	1725 +37 675	1761 +36 639	1796 +34 604	30.5
0.0	1788 34 612	1821 33 579	1853 31 547	1884 30 516	1912 28 488	1940 26 460	1965 24 435	30.0
+0.5	1961 25 439	1985 23 415	2007 21 393	2027 19 373	2045 17 355	2061 15 339	2075 +13 325	29.5
1.0	2075 13 325	2087 +11 313	2097 + 9 303	2105 + 7 295	2110 + 5 290	2114 + 2 286	2115 0 285	29.0
1.5	2121 + 1 279	2121 - 2 279	2118 - 4 282	2113 - 6 287	2106 - 8 294	2097 -10 303	2086 -12 314	28.5
2.0	2100 -12 300	2087 14 313	2072 16 328	2054 18 346	2035 20 365	2014 22 386	1990 24 410	28.0
2.5	2016 24 384	1991 26 409	1964 27 436	1936 29 464	1906 31 494	1874 33 526	1840 34 560	27.5
3.0	1880 34 520	1846 36 554	1809 37 591	1772 38 628	1732 40 668	1692 41 708	1650 42 750	27.0
3.5	1707 42 693	1664 43 736	1620 44 780	1575 45 825	1530 46 870	1483 47 917	1436 48 964	26.5
4.0	1510 48 890	1461 49 939	1412 49 988	1363 50 1037	1313 50 1087	1263 50 1137	1213 50 1187	26.0
4.5	1304 52 1096	1252 52 1148	1200 52 1200	1149 52 1251	1097 51 1303	1046 51 1354	995 51 1405	25.5
5.0	1100 53 1300	1048 52 1352	995 52 1405	944 52 1456	892 51 1508	842 50 1558	792 49 1608	25.0
5.5	908 52 1492	856 51 1544	805 50 1595	755 50 1645	706 48 1694	659 47 1741	612 46 1788	24.5
6.0	733 50 1667	684 49 1716	636 47 1764	589 46 1811	544 44 1856	500 43 1900	458 41 1942	24.0
6.5	578 46 1822	532 45 1868	488 43 1912	446 41 1954	405 40 1995	367 38 2033	330 36 2070	23.5
7.0	444 42 1956	403 40 1997	364 38 2036	327 36 2073				

TABLE 5 (concl.).

Vert. Arg. D.

Hor. Arg. 5.

Arg.	28	v	92	29	v	93	30	v	94	31	v	95	32	v	96	Arg.
d																d
-0.5	1829	+33	571	1861	+31	539	1891	+29	509	1920	+28	480	1946	+26	454	30.5
0.0	1988	23	412	2010	21	390	2030	19	370	2047	17	353	2063	15	337	30.0
+0.5	2086	+11	314	2096	+9	304	2103	+6	297	2109	+4	291	2112	+2	288	29.5
1.0	2114	-2	286	2111	-4	289	2106	-6	294	2098	-9	302	2089	-11	311	29.0
1.5	2072	15	328	2056	17	344	2039	19	361	2019	21	381	1997	23	403	28.5
2.0	1965	26	435	1938	28	462	1909	30	491	1879	31	521	1847	33	553	28.0
2.5	1805	36	595	1769	37	631	1731	39	669	1692	40	708	1652	41	748	27.5
3.0	1608	43	792	1564	44	836	1519	45	881	1474	46	926	1428	46	972	27.0
3.5	1388	48	1012	1340	48	1060	1291	49	1109	1242	49	1158	1194	49	1206	26.5
4.0	1162	50	1238	1112	50	1288	1062	50	1338	1012	49	1388	963	49	1437	26.0
4.5	944	50	1456	895	49	1505	846	49	1554	797	48	1603	750	47	1650	25.5
5.0	744	48	1656	696	47	1704	650	46	1750	605	44	1795	562	43	1838	25.0
5.5	577	44	1833	523	43	1877	482	41	1918	441	39	1959	403	37	1997	24.5
6.0	418	39	1982	379	37	2021	343	35	2057	308	33	2092	276	31	2124	24.0
6.5	296	33	2104	263	31	2137	233	29	2167	205	27	2195	180	24	2220	23.5
7.0	201	27	2199	175	24	2225	152	22	2248	132	19	2268	113	17	2287	23.0
7.5	133	20	2267	114	17	2286	98	15	2302	85	12	2315	75	9	2325	22.5
8.0	91	12	2309	80	10	2320	72	-7	2328	66	-4	2334	64	-1	2336	22.0
8.5	75	-4	2325	72	-2	2328	72	+1	2328	75	+4	2325	80	+6	2320	21.5
9.0	89	+4	2311	94	+6	2306	102	9	2298	113	12	2287	126	14	2274	21.0
9.5	134	12	2266	148	15	2252	164	17	2236	182	20	2218	203	22	2197	20.5
10.0	215	20	2185	236	23	2164	260	25	2140	286	27	2114	314	29	2086	20.0
10.5	333	28	2067	302	30	2038	393	32	2007	426	34	1974	461	36	1939	19.5
11.0	488	35	1912	524	36	1876	600	39	1800	640	41	1760	640	41	1760	19.0
11.5	680	40	1720	721	41	1679	793	42	1637	806	43	1594	850	44	1550	18.5
12.0	900	43	1500	944	44	1456	988	45	1412	1034	45	1366	1079	46	1321	18.0
12.5	1139	44	1261	1183	44	1217	1228	44	1172	1272	44	1128	1316	44	1084	17.5
13.0	1380	42	1020	1422	42	978	1464	41	936	1505	41	895	1545	40	855	17.0
13.5	1607	38	793	1644	36	756	1680	35	720	1715	34	685	1748	33	652	16.5
14.0	1802	30	598	1831	28	569	1859	27	541	1885	25	515	1909	23	491	16.0
14.5	1948	20	452	1966	18	434	1983	16	417	1998	14	402	2012	+12	388	15.5
15.0	2031	+8	369	2038	+6	362	2043	+4	357	2046	+2	354	2047	0	353	15.0
15.5	2044	-4	356	2039	-6	361	2032	-8	368	2023	-10	377	2012	-12	388	14.5
16.0	1988	16	412	1971	18	429	1952	20	448	1932	22	468	1909	23	491	14.0
16.5	1869	27	531	1841	29	559	1812	30	588	1781	32	619	1748	33	652	13.5
17.0	1697	36	703	1661	37	739	1623	38	777	1585	39	815	1545	40	855	13.0
17.5	1490	42	910	1447	43	953	1404	43	996	1360	44	1040	1316	44	1084	12.5
18.0	1262	46	1138	1216	46	1184	1170	46	1230	1125	46	1275	1079	46	1321	12.0
18.5	1033	47	1367	986	46	1414	940	46	1460	894	45	1506	850	44	1550	11.5
19.0	814	45	1586	799	44	1631	725	43	1675	682	42	1718	640	41	1760	11.0
19.5	617	42	1783	576	41	1824	536	39	1864	497	38	1903	461	36	1939	10.5
20.0	448	37	1952	412	35	1988	377	33	2023	345	31	2055	314	29	2086	10.0
20.5	310	31	2090	280	29	2120	252	27	2148	226	24	2174	203	22	2197	9.5
21.0	203	24	2107	180	22	2220	159	19	2241	141	17	2259	126	14	2274	9.0
21.5	127	17	2273	111	14	2289	98	12	2302	88	9	2312	80	-6	2320	8.5
22.0	80	10	2320	72	-7	2328	66	-4	2334	64	-1	2336	64	+1	2336	8.0
22.5	60	-2	2340	60	+1	2340	62	+4	2338	67	+6	2333	75	9	2325	7.5
23.0	68	+6	2332	75	9	2325	85	12	2315	98	14	2302	113	17	2287	7.0
23.5	104	14	2296	119	17	2281	137	19	2263	157	22	2243	180	24	2220	6.5
24.0	170	22	2230	193	24	2207	219	27	2181	246	29	2154	276	31	2124	6.0
24.5	270	29	2130	300	31	2100	332	33	2068	366	35	2034	403	37	1997	5.5
25.0	404	36	1996	441	38	1959	479	39	1921	520	41	1880	562	43	1838	5.0
25.5	573	42	1827	615	43	1785	659	44	1741	704	46	1696	750	47	1650	4.5
26.0	773	46	1627	819	47	1581	867	48	1533	915	48	1485	963	49	1437	4.0
26.5	999	48	1401	1047	48	1353	1096	49	1304	1145	49	1255	1194	49	1200	3.5
27.0	1240	48	1160	1287	47	1113	1335	47	1065	1382	47	1018	1428	46	972	3.0
27.5	1480	44	920	1524	44	876	1568	43	832	1610	42	790	1652	41	748	2.5
28.0	1704	38	696	1742	37	658	1778	36	622	1813	34	587	1847	33	553	2.0
28.5	1890	30	508	1921	28	479	1948	26	452	1974	24	426	1997	23	403	1.5
29.0	2029	19	371	2063	17	337	2063	15	337	2077	+13	323	2089	+11	311	1.0
29.5	2102	+7	298	2108	+5	292	2111	+2	289	2113	0	287	2112	-2	288	+0.5
30.0	2104	-6	296	2097	-8	303	2088	-10	312	2076	-12	324	2063	15	337	0.0
30.5	2035	-18	365	2016	-20	384	1995	-22	405	1972	-24	428	1946	-26	454	-0.5
Arg.	36	v	100	35	v	99	34	v	98	33	v	97	32	v	96	Arg.

TABLE 6.

Vert. Arg. D.

Hor. Arg. 6.

Arg.	0	v	1	v	67	2	v	68	3	v	69	4	v	70	5	v	71	6	v	72	Arg.
d																					d
-0.5	470	+34	504	+35	1496	540	+36	1460	576	+37	1424	613	+38	1387	652	+39	1348	691	+39	1309	30.5
0.0	423	32	456	34	1544	490	35	1510	526	36	1474	562	37	1438	599	38	1401	638	39	1362	30.0
+0.5	383	30	414	32	1586	447	33	1553	480	34	1520	515	36	1485	552	37	1448	589	38	1411	29.5
1.0	350	28	379	30	1621	409	31	1591	441	33	1559	474	34	1520	509	35	1491	544	36	1456	29.0
1.5	324	26	350	28	1650	379	29	1621	408	30	1592	440	32	1560	472	33	1528	505	34	1495	28.5
2.0	305	24	330	25	1670	355	26	1645	382	28	1618	411	29</								

TABLE 6 (cont.).

Vert. Arg. D.

Hor. Arg. 6.

Arg.	7 v 73	8 v 74	9 v 75	10 v 76	11 v 77	12 v 78	13 v 79	Arg.
<i>d</i>								<i>d</i>
-0.5	730+40 1270	771+41 1229	812+41 1188	853+42 1147	895+42 1105	937+42 1063	979+42 1021	30.5
0.0	677 39 1323	717 40 1283	757 41 1243	798 41 1202	840 42 1160	882 42 1118	924 42 1076	30.0
+0.5	627 38 1373	666 39 1334	705 40 1295	746 41 1254	786 41 1214	828 42 1172	869 42 1131	29.5
1.0	581 37 1419	618 38 1382	657 39 1343	696 40 1304	736 40 1264	776 41 1224	817 41 1183	29.0
1.5	540 35 1460	576 36 1424	612 37 1388	650 38 1350	688 39 1312	727 39 1273	767 40 1233	28.5
2.0	505 33 1495	538 34 1462	573 35 1427	608 36 1392	645 37 1355	682 38 1318	720 38 1280	28.0
2.5	475 30 1525	506 32 1494	539 33 1461	572 34 1428	606 35 1394	641 36 1359	677 36 1323	27.5
3.0	452 28 1548	480 29 1520	510 30 1490	540 31 1460	572 32 1428	605 33 1395	638 34 1362	27.0
3.5	433 25 1567	459 26 1541	486 27 1514	514 28 1486	543 30 1457	573 30 1427	604 32 1396	26.5
4.0	420 22 1580	442 23 1558	466 24 1534	491 26 1509	517 27 1483	544 28 1456	573 29 1427	26.0
4.5	410 19 1590	430 20 1570	450 21 1550	472 23 1528	496 24 1504	520 25 1480	545 26 1455	25.5
5.0	404 16 1596	421 17 1579	438 18 1562	457 20 1543	477 21 1523	499 22 1501	521 23 1479	25.0
5.5	401 12 1599	414 14 1586	429 15 1571	445 16 1555	462 18 1538	480 19 1520	499 20 1501	24.5
6.0	400 9 1600	410 11 1590	422 12 1578	434 13 1566	448 14 1552	463 16 1537	480 17 1520	24.0
6.5	401 6 1599	407 7 1593	416 9 1584	425 10 1575	436 11 1564	448 13 1552	461 14 1539	23.5
7.0	402+3 1598	406 4 1594	410 6 1590	417 7 1583	424 8 1576	433 10 1567	444 11 1556	23.0
7.5	404 0 1596	405+1 1595	406+2 1594	410 4 1590	414 5 1586	420 6 1580	427 8 1573	22.5
8.0	407-3 1593	404-2 1596	403-1 1597	403+1 1597	404+2 1596	407+3 1593	411 5 1589	22.0
8.5	410 7 1590	404 5 1596	400 4 1600	397-2 1603	395-1 1605	394 0 1606	395+2 1605	21.5
9.0	415 10 1585	406 8 1594	398 7 1602	392 6 1608	386 4 1614	383-3 1617	381-1 1619	21.0
9.5	420 13 1580	408 12 1592	397 10 1603	388 9 1612	380 7 1620	373 6 1627	367 5 1633	20.5
10.0	427 16 1573	412 15 1588	398 13 1602	385 12 1615	374 11 1626	364 9 1636	355 8 1645	20.0
10.5	437 19 1563	418 18 1582	401 16 1599	385 15 1615	370 14 1630	357 12 1643	346 11 1654	19.5
11.0	449 22 1551	427 21 1573	407 20 1593	388 18 1612	370 17 1630	354 16 1646	339 14 1661	19.0
11.5	464 25 1536	440 24 1560	416 23 1584	394 21 1606	374 20 1626	354 19 1646	336 17 1664	18.5
12.0	485 28 1515	457 27 1543	430 26 1570	405 24 1595	382 23 1618	359 22 1641	338 20 1662	18.0
12.5	509 31 1491	479 30 1521	450 29 1550	422 27 1578	395 26 1605	370 25 1630	346 23 1654	17.5
13.0	539 33 1461	506 32 1494	475 31 1525	444 30 1556	415 29 1585	387 27 1613	360 26 1640	17.0
13.5	574 36 1426	539 35 1461	505 34 1495	472 32 1528	440 31 1560	410 30 1590	381 28 1619	16.5
14.0	614 38 1386	577 37 1423	541 36 1459	506 34 1494	472 33 1528	440 32 1560	408 31 1592	16.0
14.5	660 39 1340	621 38 1379	583 37 1417	546 36 1454	511 35 1489	476 34 1524	442 33 1558	15.5
15.0	709 40 1291	669 39 1331	630 39 1370	592 38 1408	554 37 1446	518 36 1482	483 35 1517	15.0
15.5	761 41 1239	720 40 1280	681 39 1319	642 39 1358	603 38 1397	566 37 1434	530 36 1470	14.5
16.0	816 41 1184	775 40 1225	735 40 1265	695 39 1305	656 38 1344	618 38 1382	581 37 1419	14.0
16.5	872 41 1128	831 40 1169	791 40 1209	752 39 1248	712 39 1288	674 38 1326	637 37 1363	13.5
17.0	928 40 1072	888 40 1112	848 39 1152	809 39 1191	771 38 1229	732 38 1268	695 37 1305	13.0
17.5	984 39 1016	945 39 1055	906 38 1094	868 38 1132	830 38 1170	792 37 1208	755 37 1245	12.5
18.0	1039 37 961	1001 37 999	964 37 1036	927 37 1073	890 37 1110	853 37 1147	816 36 1184	12.0
18.5	1092 36 908	1056 36 944	1020 36 980	984 36 1016	948 36 1052	913 36 1087	877 36 1123	11.5
19.0	1144 34 856	1110 34 890	1076 34 924	1041 34 959	1007 34 993	972 34 1028	938 34 1062	11.0
19.5	1193 32 807	1162 32 838	1129 32 871	1097 33 903	1064 33 936	1031 33 969	998 33 1002	10.5
20.0	1242 30 758	1212 30 788	1182 30 818	1151 31 849	1120 31 880	1089 31 911	1057 32 943	10.0
20.5	1288 27 712	1261 28 739	1232 28 768	1204 29 796	1175 29 825	1145 30 855	1115 30 885	9.5
21.0	1334 25 666	1308 26 692	1282 26 718	1256 27 744	1229 27 771	1201 28 799	1173 28 827	9.0
21.5	1378 23 622	1355 23 645	1332 24 668	1307 25 693	1282 25 718	1256 26 744	1230 27 770	8.5
22.0	1422 20 578	1402 21 598	1380 22 620	1358 23 642	1334 24 666	1310 24 690	1286 25 714	8.0
22.5	1465 18 535	1447 19 553	1428 20 572	1408 21 592	1386 22 614	1364 22 636	1342 23 658	7.5
23.0	1508 15 492	1492 16 508	1475 18 525	1457 19 543	1438 20 562	1418 21 582	1397 21 603	7.0
23.5	1550 13 450	1537 14 463	1522 15 478	1506 16 494	1489 18 511	1471 19 529	1452 20 548	6.5
24.0	1592 10 408	1581 12 419	1568 13 432	1555 14 445	1540 16 460	1524 17 476	1506 18 494	6.0
24.5	1632 8 368	1624 9 376	1614 11 386	1602 12 398	1590 13 410	1576 15 424	1560 16 440	5.5
25.0	1671 5 329	1665 7 335	1658 8 342	1649 10 351	1638 11 362	1626 13 374	1613 14 387	5.0
25.5	1708-3 292	1704 4 296	1699 6 301	1693 7 307	1684 9 316	1675 10 325	1664 12 336	4.5
26.0	1740 0 260	1740-2 260	1737 3 263	1733 5 267	1728 6 272	1720 8 280	1711 10 289	4.0
26.5	1769+3 231	1771+1 229	1771-1 229	1770-2 230	1767 4 233	1762 6 238	1755 8 245	3.5
27.0	1792 6 208	1797 4 203	1800+2 200	1801 0 199	1801-2 199	1798 3 202	1794 5 206	3.0
27.5	1809 8 191	1816 7 184	1822 5 178	1826+3 174	1828+1 172	1828-1 172	1827-3 173	2.5
28.0	1818 11 182	1828 10 172	1837 8 163	1844 6 156	1848 4 152	1851+2 149	1852 0 148	2.0
28.5	1818 14 182	1832 12 168	1843 10 157	1852 8 148	1860 6 140	1865 5 135	1869+3 131	1.5
29.0	1810 17 190	1826 15 174	1840 13 160	1852 11 148	1862 9 138	1870 7 130	1877 5 123	1.0
29.5	1793 19 207	1812 17 188	1828 16 172	1843 14 157	1855 12 145	1866 10 134	1875 8 125	+0.5
30.0	1767 22 233	1788 20 212	1807 18 193	1824 16 176	1839 14 161	1852 12 148	1864 10 136	0.0
30.5	1732+24 268	1755+22 245	1776+20 224	1796+18 204	1813+17 187	1829+15 171	1842+13 158	-0.5
Arg.	59 v 125	58 v 124	57 v 123	56 v 122	55 v 121	54 v 120	53 v 119	Arg.

TABLE 6 (cont.).

Vert. Arg. D.

Hor. Arg. 6.

Arg.	14 v 80	15 v 81	16 v 82	17 v 83	18 v 84	19 v 85	20 v 86	Arg.
<i>d</i>								<i>d</i>
-0.5	1021+42 979	1063+42 937	1105+42 895	1146+42 854	1188+41 812	1228+41 772	1269+40 731	30.5
0.0	966 42 1034	1008 42 992	1051 42 949	1093 42 907	1135 42 865	1177 42 823	1218 41 782	30.0
+0.5	911 42 1089	954 42 1046	996 42 1004	1038 42 962	1081 42 919	1123 42 877	1165 42 835	29.5
1.0	858 42 1142	900 42 1100	942 42 1058	984 42 1016	1026 42 974	1068 42 932	1110 42 890	29.0
1.5	807 40 1193	848 41 1152	889 41 1111	930 41 1070	971 41 1029	1013 41 987	1054 41 946	28.5
2.0	759 39 1241	798 39 1202	837 40 1163	877 40 1123	918 40 1082	958 41 1042	999 41 1001	28.0
2.5	714 37 1286	751 38 1249	789 38 1211	827 39 1173	866 39 1134	905 39 1095	944 39 1056	27.5
3.0	673 35 1327	708 36 1292	744 36 1256	780 37 1220	817 37 1183	855 38 1145	892 38 1108	27.0
3.5	636 32 1364	668 33 1332	702 34 1298	736 34 1264	771 35 1229	806 36 1194	842 36 1158	26.5
4.0	602 30 1398	632 31 1368	663 31 1337	695 32 1305	727 33 1273	760 33 1240	794 34 1206	26.0
4.5	572 27 1428	599 28 1401	628 29 1372	657 30 1343	687 30 1313	717 31 1283	749 32 1251	25.5
5.0	544 24 1456	569 25 1431	594 26 1406	621 27 1379	648 28 1352	676 28 1324	705 29 1295	25.0
5.5	520 21 1480	542 22 1458	564 23 1436	588 24 1412	612 25 1388	638 26 1362	664 27 1336	24.5
6.0	497 18 1503	516 19 1484	536 20 1464	556 21 1444	578 22 1422	601 23 1399	625 24 1375	24.0
6.5	476 15 1524	491 16 1509	508 17 1492	526 18 1474	545 20 1455	565 21 1435	586 22 1414	23.5
7.0	455 12 1545	468 13 1532	482 15 1518	497 16 1503	513 17 1487	530 18 1470	549 19 1451	23.0
7.5	435 9 1565	445 10 1555	456 12 1544	468 13				

TABLE 6 (cont.).

Vert. Arg. D.

Hor. Arg. 6.

TABLE 6 (concl.).

Vert. Arg. D.

Hor. Arg. 6.

Arg.	21	v	87	22	v	88	23	v	89	24	v	90	25	v	91	26	v	92	27	v	93	Arg.
d																						d
-0.5	1309	+39	691	1348	+39	652	1386	+38	614	1424	+37	576	1460	+36	540	1496	+35	504	1530	+34	470	30.5
0.0	1259	40	741	1299	40	701	1339	39	661	1378	38	622	1416	37	584	1453	36	547	1489	35	511	30.0
+0.5	1206	41	794	1247	41	753	1288	40	712	1327	39	673	1366	39	634	1405	38	595	1442	37	558	29.5
1.0	1151	41	849	1193	41	807	1234	41	766	1274	40	726	1314	39	686	1352	39	648	1391	38	609	29.0
1.5	1096	41	904	1137	41	863	1177	41	823	1218	40	782	1258	40	742	1297	39	703	1335	38	665	28.5
2.0	1039	41	961	1080	40	920	1120	40	880	1160	40	840	1200	39	800	1239	39	761	1277	38	723	28.0
2.5	984	39	1016	1023	39	977	1063	39	937	1102	39	898	1141	39	859	1180	38	820	1218	38	782	27.5
3.0	930	38	1070	968	38	1032	1006	38	994	1044	38	956	1082	38	918	1120	38	880	1158	37	842	27.0
3.5	878	36	1122	914	36	1086	951	37	1049	988	37	1012	1024	37	976	1061	37	939	1098	36	902	26.5
4.0	828	34	1172	863	35	1137	807	35	1103	932	35	1068	968	35	1032	1003	35	997	1038	35	962	26.0
4.5	780	32	1220	813	33	1187	746	33	1154	879	33	1121	912	34	1088	946	34	1054	980	34	1020	25.5
5.0	735	30	1265	765	30	1235	706	31	1204	827	31	1173	858	32	1142	890	32	1110	922	32	1078	25.0
5.5	691	27	1309	719	28	1281	657	29	1253	776	29	1224	806	30	1194	836	30	1164	866	30	1134	24.5
6.0	649	25	1351	674	26	1326	615	26	1300	727	27	1273	754	28	1246	782	28	1218	811	29	1189	24.0
6.5	608	22	1392	631	23	1369	575	24	1345	679	25	1321	704	26	1296	730	26	1270	757	27	1243	23.5
7.0	568	20	1432	588	21	1412	538	22	1390	632	23	1368	655	23	1345	679	24	1321	703	25	1297	23.0
7.5	529	17	1471	546	18	1454	505	19	1435	585	20	1415	606	21	1394	628	22	1372	650	23	1350	22.5
8.0	490	15	1510	505	16	1495	475	17	1478	539	18	1461	558	19	1442	577	20	1423	598	21	1402	22.0
8.5	451	12	1549	464	13	1536	448	14	1522	493	16	1507	510	17	1490	527	18	1473	546	19	1454	21.5
9.0	413	10	1587	424	11	1576	425	12	1565	448	13	1552	462	15	1538	477	16	1523	494	17	1506	21.0
9.5	377	7	1623	384	8	1616	393	10	1607	404	11	1596	416	12	1584	429	14	1571	443	15	1557	20.5
10.0	341	4	1659	346	6	1654	352	7	1648	360	9	1640	370	10	1630	380	12	1620	393	13	1607	20.0
10.5	308	+2	1692	310	+3	1690	314	5	1686	319	6	1681	326	8	1674	334	9	1666	344	11	1656	19.5
11.0	277	-1	1723	276	0	1724	278	+2	1722	280	4	1720	285	5	1715	291	7	1709	298	8	1702	19.0
11.5	250	4	1750	247	-2	1753	245	-1	1755	245	+1	1755	247	+3	1753	251	4	1749	256	6	1744	18.5
12.0	228	7	1772	222	5	1778	218	4	1782	215	-2	1785	214	0	1786	215	+2	1785	218	4	1782	18.0
12.5	212	10	1788	204	8	1796	196	6	1804	191	4	1809	187	-3	1813	186	-1	1814	186	+1	1814	17.5
13.0	204	13	1796	192	11	1808	182	9	1818	174	7	1826	167	5	1833	163	3	1837	160	-2	1840	17.0
13.5	202	16	1798	188	14	1812	175	12	1825	164	10	1836	155	8	1845	148	6	1852	143	4	1857	16.5
14.0	210	18	1790	192	16	1808	177	15	1823	163	13	1837	152	11	1848	142	9	1858	134	7	1866	16.0
14.5	226	21	1774	206	19	1794	188	17	1812	172	15	1828	157	13	1843	145	11	1855	135	9	1865	15.5
15.0	250	23	1750	228	21	1772	208	19	1792	190	18	1810	173	16	1827	158	14	1842	145	12	1855	15.0
15.5	284	25	1716	260	23	1740	237	22	1763	216	20	1784	197	18	1803	180	16	1820	165	14	1835	14.5
16.0	325	27	1675	299	25	1701	274	24	1726	252	22	1748	231	20	1769	211	18	1789	194	16	1806	14.0
16.5	372	28	1628	345	27	1655	319	25	1681	295	24	1703	272	22	1728	251	20	1749	231	18	1769	13.5
17.0	426	29	1574	397	28	1603	370	26	1630	344	25	1656	320	24	1680	297	22	1703	276	20	1724	13.0
17.5	484	30	1516	454	29	1546	426	28	1574	399	26	1601	374	25	1626	350	23	1650	327	22	1673	12.5
18.0	545	30	1455	515	29	1485	486	28	1514	459	27	1541	432	26	1568	407	25	1593	383	23	1617	12.0
18.5	609	31	1391	579	30	1421	550	29	1450	521	28	1479	494	27	1506	468	25	1532	443	24	1557	11.5
19.0	675	31	1325	644	30	1356	615	29	1385	586	28	1414	558	27	1442	531	26	1469	506	25	1494	11.0
19.5	741	31	1259	710	30	1290	681	29	1319	652	28	1348	624	28	1376	596	27	1404	570	26	1430	10.5
20.0	807	30	1193	777	30	1223	747	29	1253	718	29	1282	690	28	1310	662	27	1338	636	26	1364	10.0
20.5	873	30	1127	844	30	1156	814	29	1186	785	29	1215	757	28	1243	729	28	1271	702	27	1298	9.5
21.0	939	29	1061	910	29	1090	881	29	1119	852	29	1148	824	28	1176	796	28	1204	768	27	1232	9.0
21.5	1005	29	995	976	29	1024	947	29	1053	919	29	1081	890	28	1110	862	28	1138	834	28	1166	8.5
22.0	1070	28	930	1042	28	958	1014	28	986	985	28	1015	957	28	1043	929	28	1071	900	28	1100	8.0
22.5	1136	28	864	1108	28	892	1080	28	920	1052	28	948	1024	28	976	995	28	1005	967	28	1033	7.5
23.0	1201	27	799	1174	27	826	1146	28	854	1118	28	882	1090	28	910	1062	28	938	1033	29	967	7.0
23.5	1266	26	734	1239	27	761	1212	27	788	1185	28	815	1157	28	843	1128	29	872	1100	29	900	6.5
24.0	1331	26	669	1305	26	695	1278	27	722	1251	28	749	1223	28	777	1195	28	805	1166	29	834	6.0
24.5	1395	25	605	1370	26	630	1344	26	656	1317	27	683	1290	28	710	1262	28	738	1233	29	767	5.5
25.0	1460	24	540	1435	25	565	1410	26	590	1384	27	616	1356	28	644	1328	28	672	1300	29	700	5.0
25.5	1523	23	477	1499	24	501	1475	25	525	1449	26	551	1422	27	578	1395	28	605	1366	29	634	4.5
26.0	1584	22	416	1561	23	439	1538	24	462	1513	25	487	1487	26	513	1460	28	540	1432	29	568	4.0
26.5	1642	20	358	1621	22	379	1599															

TABLE 7.

Vert. Arg. D.

Hor. Arg. 7.

Arg.	0 v	1 v 51	2 v 52	3 v 53	4 v 54	5 v 55	6 v 56	Arg.
d								d
-0.5	466+35	501+36 699	537+36 663	573+36 627	610+36 590	646+36 554	682+36 518	30.5
0.0	444 36	480 36 720	517 37 683	554 37 646	591 37 609	628 37 572	665 37 535	30.0
+0.5	426 35	461 36 739	498 36 702	534 37 666	571 37 629	608 37 592	645 37 555	29.5
1.0	412 34	447 35 753	482 35 718	518 36 682	554 36 646	590 36 610	626 36 574	29.0
1.5	405 32	438 33 762	471 34 729	505 34 695	539 34 661	574 34 626	608 34 592	28.5
2.0	406 30	437 30 763	468 31 732	499 32 701	531 32 669	563 32 637	595 32 605	28.0
2.5	416 27	444 28 756	472 28 728	500 29 700	529 29 671	558 29 642	587 29 613	27.5
3.0	434 24	458 24 742	483 25 717	508 25 692	534 26 666	560 26 640	586 26 614	27.0
3.5	459 21	480 21 720	501 22 699	523 22 677	545 22 655	567 22 633	590 22 610	26.5
4.0	488 18	506 18 694	524 18 676	542 19 658	561 19 639	580 19 620	599 19 601	26.0
4.5	521 15	536 15 664	550 15 650	566 15 634	581 15 619	596 15 604	612 15 588	25.5
5.0	554 12	566 12 634	578 12 622	590 12 610	602 12 598	614 12 586	627 12 573	25.0
5.5	586 9	596 9 604	605 9 595	614 9 586	624 9 576	633 9 567	642 9 558	24.5
6.0	615 7	622 7 578	628 7 572	635 7 565	642 7 558	648 6 552	655 6 545	24.0
6.5	638 5	643 5 557	647 5 553	652 4 548	656 4 544	660 4 540	664 4 536	23.5
7.0	655 3	658 3 542	660 2 538	662 + 2 538	665 + 2 535	666 + 2 534	668 + 2 532	23.0
7.5	664 + 1	665 + 1 535	666 + 1 534	666 0 534	667 0 533	666 0 534	666 0 534	22.5
8.0	667 - 1	666 - 1 534	665 - 2 535	663 - 2 537	661 - 2 539	659 - 2 541	657 - 2 543	22.0
8.5	663 3	659 3 541	656 4 544	652 4 548	649 4 551	644 4 556	640 4 560	21.5
9.0	652 5	646 6 554	641 6 559	635 6 565	629 6 571	623 6 577	617 6 583	21.0
9.5	636 8	628 8 572	620 8 580	612 8 588	604 8 596	596 8 604	588 8 612	20.5
10.0	618 11	607 11 593	596 11 604	586 11 614	575 11 625	564 11 636	554 10 646	20.0
10.5	598 14	584 14 616	570 14 630	557 14 643	543 13 657	530 13 670	517 13 683	19.5
11.0	579 17	562 17 638	544 17 656	528 17 672	511 16 689	495 16 705	479 16 721	19.0
11.5	562 21	542 20 658	521 20 679	501 20 699	481 19 719	462 19 738	444 18 756	18.5
12.0	550 24	526 24 674	502 24 698	479 23 721	456 23 744	433 22 767	412 21 788	18.0
12.5	544 28	516 27 684	489 27 711	463 26 737	436 26 764	411 25 789	386 24 814	17.5
13.0	544 31	514 30 686	483 30 717	454 30 746	424 29 776	396 28 804	368 27 832	17.0
13.5	551 33	518 33 682	485 33 715	452 32 748	420 32 780	389 31 811	359 30 841	16.5
14.0	564 35	528 35 672	493 35 707	459 34 741	425 34 775	391 33 809	358 32 842	16.0
14.5	581 37	544 37 656	508 36 692	471 36 729	436 35 764	401 35 799	367 34 833	15.5
15.0	600 37	563 37 637	526 37 674	489 36 711	453 36 747	417 35 783	382 35 818	15.0
15.5	619 37	583 37 617	546 37 654	509 36 691	473 36 727	438 35 762	403 35 797	14.5
16.0	636 35	601 36 599	565 35 635	530 35 670	495 35 705	460 34 740	426 34 774	14.0
16.5	649 33	615 34 585	582 34 618	548 33 652	515 33 685	482 33 718	450 32 750	13.5
17.0	656 31	625 31 575	594 31 606	563 31 637	532 31 668	502 30 698	472 30 728	13.0
17.5	656 28	628 28 572	600 28 600	573 28 627	545 28 655	517 27 683	490 27 710	12.5
18.0	650 24	626 24 574	601 24 599	577 24 623	552 24 648	528 24 672	504 24 696	12.0
18.5	638 21	617 21 583	596 21 604	576 21 624	555 21 645	534 20 666	514 20 686	11.5
19.0	621 17	604 17 596	587 17 613	570 17 639	553 17 647	536 17 664	519 16 681	11.0
19.5	602 14	588 14 612	574 14 626	561 14 639	547 14 653	534 13 666	521 13 679	10.5
20.0	582 11	571 11 629	561 11 639	550 10 650	540 10 660	530 10 670	520 10 680	10.0
20.5	564 8	556 8 644	548 8 652	540 7 660	533 7 667	526 7 674	520 6 680	9.5
21.0	548 5	543 5 657	538 5 662	533 5 667	528 4 672	524 4 676	520 4 680	9.0
21.5	537 3	534 3 666	532 - 2 668	529 - 2 671	527 - 2 673	526 - 2 674	524 - 1 676	8.5
22.0	533 - 1	532 - 1 668	532 0 668	531 0 669	531 0 669	532 0 668	532 + 1 668	8.0
22.5	536 + 1	537 + 1 663	538 + 2 662	540 + 2 660	542 + 2 658	544 + 2 656	546 2 654	7.5
23.0	545 3	548 3 652	552 3 648	555 4 645	559 4 641	563 4 637	567 4 633	7.0
23.5	562 5	567 5 633	572 5 628	578 5 622	583 5 617	588 5 612	594 6 606	6.5
24.0	585 7	592 7 608	600 7 600	607 7 593	614 7 586	621 7 579	628 7 572	6.0
24.5	614 9	623 9 577	632 9 568	641 9 559	650 9 550	659 9 541	667 8 533	5.5
25.0	646 12	658 12 542	669 11 531	680 11 520	691 11 509	702 10 498	712 10 488	5.0
25.5	679 15	694 14 506	708 14 492	721 13 479	734 13 466	747 12 453	759 12 441	4.5
26.0	712 18	729 17 471	746 16 454	762 16 438	778 15 422	792 15 408	807 14 393	4.0
26.5	741 21	762 20 438	782 19 418	801 19 399	819 18 381	836 17 364	853 16 347	3.5
27.0	766 24	790 23 410	812 22 388	834 21 366	855 20 345	875 19 325	894 18 306	3.0
27.5	784 27	810 26 390	836 25 364	861 24 339	885 23 315	907 22 293	929 21 271	2.5
28.0	794 30	823 29 377	852 28 348	879 27 321	906 26 294	931 25 269	955 24 245	2.0
28.5	795 32	827 31 373	858 30 342	888 29 312	917 28 283	944 27 256	970 26 230	1.5
29.0	788 34	822 33 378	855 32 345	886 31 314	917 30 283	947 29 253	975 27 225	1.0
29.5	774 35	809 35 391	844 34 356	877 33 323	909 32 291	940 30 260	969 29 231	+0.5
30.0	756 36	791 35 409	826 34 374	860 33 340	892 32 308	924 31 276	954 30 246	0.0
30.5	734 + 35	769 + 35 431	804 + 34 396	837 + 33 363	870 + 32 330	901 + 31 299	931 + 30 269	-0.5
Arg.	50 v	49 v 99	48 v 98	47 v 97	46 v 96	45 v 95	44 v 94	Arg.

TABLE 7 (cont.).

Vert. Arg. D.

Hor. Arg. 7.

Arg.	7 v 57	8 v 58	9 v 59	10 v 60	11 v 61	12 v 62	13 v 63	Arg.
d								d
-0.5	718+36 482	753+35 447	788+34 412	821+33 379	854+32 346	886+31 314	917+30 283	30.5
0.0	701 36 499	738 36 462	773 35 427	808 35 392	843 34 357	876 33 324	908 32 292	30.0
+0.5	682 37 518	718 36 482	754 36 446	790 35 410	825 34 375	858 33 342	891 32 309	29.5
1.0	662 36 538	698 36 502	733 35 467	768 35 432	802 34 398	836 33 364	868 32 332	29.0
1.5	643 34 557	677 34 523	711 34 489	745 33 455	778 33 422	810 32 390	842 31 358	28.5
2.0	627 32 573	659 32 541	691 32 509	723 31 477	754 31 446	784 30 416	814 29 386	28.0
2.5	617 29 583	646 29 554	675 29 525	704 29 496	732 28 468	760 28 440	787 27 413	27.5
3.0	612 26 588	636 26 562	663 26 537	689 25 511	714 25 486	739 25 461	763 24 437	27.0
3.5	612 22 588	635 22 565	657 22 543	679 22 521	701 22 499	722 21 478	743 21 457	26.5
4.0	618 19 582	636 19 564	655 19 545	674 18 526	692 18 508	710 18 490	727 17 473	26.0
4.5	627 15 573	642 15 558	657 15 543	672 15 528	687 14 513	701 14 499	715 14 485	25.5
5.0	639 12 561	650 12 550	662 12 538	673 11 527	684 11 516	695 11 505	706 10 494	25.0
5.5	651 9 549	659 9 541	668 8 532	676 8 524	684 8 516	691 7 509	699 7 501	24.5
6.0	661 6 539	667 6 533	672 5 528	678 5 522	682 5 518	687 5 513	692 4 508	24.0
6.5	668 3 532	671 3 529	674 3 526	677 + 3 523	679 + 2 521	682 + 2 518	683 + 2 517	23.5
7.0	670 + 1 530	671 + 1 529	671 + 1 529	672 0 528	672 0 528	672 0 528	672 0 528	23.0
7.5	665 - 1 535	664 - 1 536	663 - 1 537	662 - 2 538	660 - 2 540	658 - 2 542	656 - 2 544	22.5
8.0	654 3 546	652 3 548	648 3 552	645 3 555	642 3 558	638 4 562	635 4 565	22.0
8.5	636 4 564	632 4 568	627 5 573	622 5 578	617 5 583	612 5 588	608 5 592	21.5
9.0	611 6 589	604 6 596	598 6 602	592 6 608	586 6 614	580 6 620	573 6 627	21.0
9.5	579 8 621	571 8 629	563 8 637	555 8 645	548 8 652	540 7 660	533 7 667	20.5
10.0	543 10 657	533 10 667	523 10 677	514 9 686	505 9 695	496 9 704	487 8 713	20.0
10.5	504 12 696	492 12 708	480 12 720	469 11 731	458 11 742	448 10 752	438 9 762	19.5

TABLE 7 (cont.).

Vert. Arg. D.

Hor. Arg. 7.

Arg.	14	v	64	15	v	65	16	v	66	17	v	67	18	v	68	19	v	69	20	v	70	Arg.
d																						d
-0.5	947	+29	253	975	+28	225	1002	+26	198	1027	+24	173	1051	+23	149	1072	+21	128	1092	+19	108	30.5
0.0	939	30	261	969	29	231	997	27	203	1023	26	177	1048	24	152	1072	22	128	1093	20	107	30.0
+0.5	923	31	277	953	30	247	982	28	218	1009	27	191	1035	25	165	1059	23	141	1082	21	118	29.5
1.0	900	31	300	930	30	270	959	28	241	986	27	214	1012	25	188	1037	24	163	1060	22	140	29.0
1.5	872	30	328	902	29	298	930	28	270	957	26	243	982	25	218	1006	23	194	1029	22	171	28.5
2.0	843	28	357	871	27	329	898	26	302	923	25	277	948	24	252	971	22	229	992	21	208	28.0
2.5	814	26	386	839	25	361	864	24	336	888	23	312	910	22	290	932	21	268	952	19	248	27.5
3.0	787	23	413	810	22	390	832	22	368	853	21	347	873	20	327	892	18	308	910	17	290	27.0
3.5	763	20	437	783	19	417	802	19	398	820	18	380	838	17	362	854	16	346	869	15	331	26.5
4.0	744	17	456	760	16	440	776	15	424	791	15	409	805	14	395	818	13	382	831	12	369	26.0
4.5	728	13	477	741	13	459	753	12	447	765	11	435	776	11	424	786	10	414	796	9	404	25.5
5.0	716	10	484	725	9	475	734	9	466	743	8	457	750	8	450	758	7	442	765	6	435	25.0
5.5	705	7	495	712	6	488	718	6	482	723	5	477	728	5	472	733	4	467	737	4	463	24.5
6.0	696	4	504	699	3	501	702	3	498	705	3	495	708	2	492	709	2	491	711	1	489	24.0
6.5	685	+1	515	686	+1	514	687	+1	513	687	0	513	687	0	513	686	-1	514	686	-1	514	23.5
7.0	671	-1	529	669	-1	530	669	-1	531	668	-2	532	666	-2	534	664	-2	536	662	2	538	23.0
7.5	654	2	546	651	3	549	648	3	552	646	3	554	642	3	558	639	3	561	636	4	564	22.5
8.0	631	4	569	627	4	573	623	4	577	619	4	581	615	4	585	611	4	589	606	4	594	22.0
8.5	602	5	598	598	5	602	592	5	608	588	5	612	583	5	617	578	5	622	573	5	627	21.5
9.0	567	6	638	562	6	644	556	6	650	550	6	656	545	5	661	540	5	666	535	5	671	21.0
9.5	526	7	674	519	7	681	513	6	687	507	6	693	501	6	699	496	5	704	491	5	709	20.5
10.0	480	8	720	472	7	728	465	7	735	459	6	741	453	6	747	447	5	753	443	4	757	20.0
10.5	429	9	771	420	8	780	413	7	787	406	6	794	400	6	800	394	5	806	390	4	810	19.5
11.0	375	10	825	366	9	834	357	8	843	350	7	850	343	6	857	338	5	862	333	4	867	19.0
11.5	322	11	878	311	10	889	302	9	898	293	8	907	286	7	914	280	5	920	275	4	925	18.5
12.0	271	13	929	259	12	941	248	10	952	238	9	962	230	8	970	223	6	977	218	4	982	18.0
12.5	225	15	975	211	13	989	198	12	1002	187	10	1013	178	9	1022	170	7	1030	164	5	1036	17.5
13.0	187	17	1013	171	15	1029	156	14	1044	144	12	1056	133	10	1067	124	8	1076	117	6	1083	17.0
13.5	159	19	1041	141	17	1059	125	15	1075	110	13	1090	98	11	1102	87	9	1113	79	7	1121	16.5
14.0	142	21	1058	122	19	1078	104	17	1096	88	15	1112	74	13	1126	62	11	1138	52	9	1148	16.0
14.5	137	22	1063	115	21	1085	96	19	1104	78	17	1122	62	15	1138	49	12	1151	38	10	1162	15.5
15.0	144	24	1056	121	22	1079	100	20	1100	81	18	1119	64	16	1136	50	14	1150	37	12	1163	15.0
15.5	162	24	1038	138	23	1062	116	21	1084	97	19	1103	79	17	1121	63	15	1137	50	12	1150	14.5
16.0	188	24	1012	165	23	1035	143	21	1057	123	19	1077	105	17	1095	88	15	1112	74	13	1126	14.0
16.5	221	24	979	198	22	1002	177	20	1023	157	19	1043	139	17	1061	123	15	1077	109	13	1091	13.5
17.0	258	22	942	236	21	964	216	20	984	198	18	1002	180	16	1020	165	15	1035	151	13	1049	13.0
17.5	297	20	903	277	19	923	258	18	942	241	16	959	226	15	974	212	13	988	199	12	1001	12.5
18.0	335	18	865	317	17	883	301	16	899	286	14	914	272	13	928	260	12	940	249	10	951	12.0
18.5	370	15	830	356	14	844	342	13	858	330	12	870	318	11	882	308	10	892	298	9	902	11.5
19.0	402	12	798	391	11	809	380	10	820	370	10	830	361	9	839	353	8	847	346	7	854	11.0
19.5	431	9	769	423	8	777	415	8	785	408	7	792	401	6	799	396	5	804	391	4	809	10.5
20.0	456	6	744	451	5	749	446	5	754	441	4	759	437	4	763	434	3	766	432	2	768	10.0
20.5	480	3	720	476	-3	724	474	-2	726	472	-2	728	470	-1	730	469	-1	731	469	0	731	9.5
21.0	501	-1	699	500	0	700	500	0	700	500	0	700	501	+1	699	502	+1	698	503	+1	697	9.0
21.5	523	+1	677	524	+1	676	525	+2	675	527	+2	673	529	+2	671	532	+2	668	534	+3	666	8.5
22.0	546	3	654	548	3	652	551	3	649	554	3	646	558	3	642	561	4	639	565	4	635	8.0
22.5	572	4	628	575	4	625	579	4	621	583	4	617	587	4	613	592	4	608	596	4	604	7.5
23.0	602	5	598	606	4	594	611	4	589	615	4	585	620	4	580	624	4	576	628	4	572	7.0
23.5	637	5	563	642	5	558	646	5	554	651	4	549	655	4	545	659	4	541	663	4	537	6.5
24.0	677	5	523	682	5	518	687	5	513	691	4	509	695	4	505	699	3	501	702	3	498	6.0
24.5	723	5	477	728	5	472	732	4	468	736	4	464	740	3	460	743	3	457	745	2	455	5.5
25.0	774	5	426	779	5	421	783	4	417	787	3	413	790	2	410	792	2	408	793	+1	407	5.0
25.5	829	5	371	834	5	366	838	4	362	841	3	359	843	2	357	845	+1	355	845	0	355	4.5
26.0	886	6	314	892	5	308	896	4	304	898	2	302	900	1	300	901	0	299	900	-1	300	4.0
26.5	944	6	256	949	5	251	954	4	246	956	3	244	958	1	242	958	-1	242	957	2	243	3.5
27.0	998	7	202	1005	6	195	1010	4	190	1013	2	187	1014	1	186	1014	1	186	1012	2	188	3.0
27.5	1048	8	152	1055	6	145	1061	5	139	1065	3	135	1067	1	133	1067	-1	133	1065	3	135	2.5
28.0	1089	10	111	1098	8	102	1105	6	95	1110	4	90	1112	2	88	1113	0	87	1112	2	88	2.0
28.5	1120	11	80	1130	9	70	1138	7	62	1144	5	56	1148	3	52	1150	0	50	1149	2	51	1.5
29.0	1139	13	61	1151	11	49	1160	8	40	1167	6	33	1172	4	28	1175	+2	25	1176	-1	24	1.0
29.5	1145	14	55	1158	12	42	1169	10	31	1177	7	23	1184	5	16	1188	3	12	1189	0	11	+0.5
30.0	1138	15	62	1152	13	48	1164	11	36	1173	9	27	1									

TABLE 8.

Vert. Arg. D.

Hor. Arg. 8.

TABLE 8 (concl.).

Vert. Arg. D.

Hor. Arg. 8.

Arg.	0 v	1 v 26	2 v 27	3 v 28	4 v 29	5 v 30	6 v 31	Arg.
d								d
-0.5	19+5	25+6 235	32+8 228	41+10 219	51+11 209	62+12 198	75+13 185	30.5
0.0	26 8	35 9 225	45 11 215	56 12 204	69 13 191	83 14 177	97 15 163	30.0
+0.5	42 10	53 12 207	66 13 194	79 14 181	93 14 167	108 15 152	122 15 138	29.5
1.0	64 12	77 13 183	90 14 170	104 14 156	119 15 141	133 15 127	148 14 112	29.0
1.5	89 13	102 13 158	116 14 144	130 14 130	144 14 116	157 13 103	170 13 90	28.5
2.0	115 13	128 13 132	141 13 119	153 12 107	165 12 95	177 11 83	188 10 72	28.0
2.5	139 11	151 11 109	162 11 98	172 10 88	182 9 78	191 9 69	199 7 61	27.5
3.0	159 9	168 9 92	176 8 84	184 7 76	191 6 69	197 5 63	202 4 58	27.0
3.5	172 7	179 6 81	185 5 75	190 4 70	194 4 66	197+2 63	199+1 61	26.5
4.0	179 4	183 3 77	186+3 74	188+2 72	190+1 70	190 0 70	189-1 71	26.0
4.5	179+2	181+1 79	181 0 79	181-1 79	180-1 80	178-2 82	176 3 84	25.5
5.0	174 0	173-1 87	172-2 88	170-2 90	168-3 92	164 3 96	161 4 99	25.0
5.5	164-2	162 2 98	160 3 100	157 3 103	154 4 106	150 4 110	146 4 114	24.5
6.0	152 2	150 3 110	147 3 113	144 3 116	140 3 120	137 4 123	133 4 127	24.0
6.5	140 2	137 3 123	135 3 125	132 3 128	129 3 131	127 3 133	124 3 136	23.5
7.0	129 2	126 2 132	124 2 134	122-2 136	122-2 138	121-1 139	119-1 141	23.0
7.5	122-1	121-1 139	120-1 140	120 0 140	120 0 140	120 0 140	120 0 140	22.5
8.0	118+1	118+1 142	119+1 141	120+1 140	122+1 138	123+1 137	124+1 136	22.0
8.5	119 2	121 2 139	123 2 137	126 2 134	128 2 132	130 2 130	133 2 127	21.5
9.0	125 3	128 3 132	132 3 128	135 3 125	138 3 122	142 3 118	145 3 115	21.0
9.5	135 4	140 4 120	144 4 116	148 4 112	151 3 109	154 3 106	157 3 103	20.5
10.0	149 5	154 4 106	158 4 102	161 3 99	164 3 96	167 2 93	169+2 91	20.0
10.5	165 4	169 4 91	172 3 88	175+2 85	177+2 83	178+1 82	179 0 81	19.5
11.0	181 3	183+2 77	185+1 75	186 0 74	186 0 74	184-1 74	184-2 76	19.0
11.5	194+1	195 0 65	195-1 65	193-2 67	191-3 69	188 4 72	184 5 76	18.5
12.0	204-1	202-2 58	199 4 61	195 5 65	190 6 70	184 7 76	176 7 84	18.0
12.5	208 4	203 6 57	197 7 63	190 8 70	182 8 78	173 9 87	163 10 97	17.5
13.0	204 8	196 9 64	187 10 73	177 10 83	166 11 94	155 12 105	144 12 116	17.0
13.5	194 10	183 11 77	171 12 89	159 13 101	146 13 114	133 13 127	120 13 140	16.5
14.0	177 13	164 14 96	150 14 110	136 14 124	122 14 138	108 14 152	94 13 166	16.0
14.5	155 14	140 15 120	125 15 135	111 14 149	97 14 163	83 13 177	70 13 190	15.5
15.0	130 15	115 15 145	100 14 160	86 14 174	73 13 187	60 12 200	49 11 211	15.0
15.5	105 14	91 14 169	78 13 182	65 12 195	54 11 206	43 10 217	34 8 226	14.5
16.0	83 13	71 12 189	59 11 201	49 10 211	40 8 220	32 7 228	26 5 234	14.0
16.5	66 10	56 9 204	48 8 212	40 7 220	34 5 226	30-4 230	27-2 233	13.5
17.0	56 8	49 6 211	43 5 217	39-4 221	36-2 224	35 0 225	35+1 225	13.0
17.5	52 4	48-3 212	46-2 214	45 0 215	45+1 215	47+2 213	49 4 211	12.5
18.0	56-1	55 0 205	56+1 204	57+2 203	60 3 200	64 4 196	69 5 191	12.0
18.5	66+1	67+2 193	70 3 190	74 4 186	78 5 182	84 6 176	90 6 170	11.5
19.0	79 3	83 4 177	87 5 173	92 5 168	98 6 162	104 6 156	110 7 150	11.0
19.5	95 4	100 5 160	105 5 155	110 6 150	116 6 144	122 6 138	128 6 132	10.5
20.0	111 5	116 5 144	121 5 139	126 5 134	131 5 129	136 5 124	141 5 119	10.0
20.5	125 4	129 4 131	133 4 127	138 4 122	142 4 118	146 4 114	149 4 111	9.5
21.0	135 3	138 3 122	142 3 118	144 3 116	147 3 113	150 2 110	152 2 108	9.0
21.5	141 2	143+2 117	145+2 115	146+1 114	148+1 112	148+1 112	149+1 111	8.5
22.0	142+1	143 0 117	143 0 117	143 0 117	143 0 117	143 0 117	142-1 118	8.0
22.5	138-1	137-1 123	136-1 124	135-1 125	134-1 126	133-1 127	132-1 128	7.5
23.0	131 2	129 2 131	127 2 133	125 2 135	123 2 137	122 2 138	120 1 140	7.0
23.5	120 2	118 2 142	115 2 145	114 2 146	112 2 148	110-1 150	109-1 151	6.5
24.0	108 2	105 2 155	104 2 156	102-1 158	101-1 159	101 0 159	100 0 160	6.0
24.5	96-2	94-1 166	94-1 166	93 0 167	94+1 166	95+1 165	96+2 164	5.5
25.0	86 0	86 0 174	87+1 173	88+2 172	91 2 169	93 3 167	97 4 163	5.0
25.5	81+2	83+3 177	86 3 174	90 4 170	94 4 166	98 5 162	104 6 156	4.5
26.0	81 4	85 5 175	91 6 169	97 6 163	103 7 157	110 7 150	117 7 143	4.0
26.5	88 7	95 8 165	102 8 158	111 8 149	119 9 141	128 9 132	137 9 123	3.5
27.0	101 9	111 10 149	120 10 140	130 10 130	141 10 119	150 10 110	160 9 100	3.0
27.5	121 11	132 11 128	144 11 116	155 11 105	166 11 94	176 10 84	185 9 75	2.5
28.0	145 13	157 12 103	169 12 91	181 11 79	191 10 69	201 9 59	209 8 51	2.0
28.5	171 13	183 12 77	195 11 65	206 10 54	215 9 45	223 7 37	230 6 30	1.5
29.0	196 12	208 11 52	218 10 42	227 8 33	234 7 26	240 5 20	244+3 16	1.0
29.5	218 10	227 9 33	235 7 25	242 6 18	246 4 14	249+2 11	250 0 10	+0.5
30.0	234 8	241 6 19	246 4 14	249+2 11	251+1 9	250-1 10	248-3 12	0.0
30.5	241+5	245+3 15	247+1 13	247-1 13	245-3 15	242-4 18	237-6 23	-0.5
Arg.	25 v	24 v 49	23 v 48	22 v 47	21 v 46	20 v 45	19 v 44	Arg.

Arg.	7 v 32	8 v 33	9 v 34	10 v 35	11 v 36	12 v 37	Arg.
d							d
-0.5	88+14 172	102+14 158	117+15 143	131+15 129	146+14 114	160+14 100	30.5
0.0	112 15 148	127 15 133	142 15 118	157 15 103	172 14 88	185 13 75	30.0
+0.5	138 15 122	153 15 107	167 14 93	181 14 79	194 13 66	207 12 53	29.5
1.0	162 14 98	176 13 84	189 13 71	201 12 59	212 10 48	222 9 38	29.0
1.5	183 12 77	195 11 65	205 10 55	215 9 45	223 7 37	230 6 30	28.5
2.0	198 9 62	207 8 53	214 7 46	221 6 39	226 4 34	229+3 31	28.0
2.5	206 6 54	212 5 48	216 4 44	219+2 41	221+1 39	221 0 39	27.5
3.0	206+3 54	208+2 52	210+1 50	210-1 50	209-2 51	206-3 54	27.0
3.5	200 0 60	199-1 61	198-2 62	195 3 65	192 4 68	188 5 72	26.5
4.0	188-2 72	185 3 75	182 4 78	178 5 82	173 5 87	167 6 93	26.0
4.5	172 4 88	168 4 92	164 5 96	159 5 101	153 6 107	147 6 113	25.5
5.0	156 4 104	152 5 108	147 5 113	142 5 118	136 5 124	131 6 129	25.0
5.5	141 4 119	137 4 123	132 5 128	128 5 132	123 5 137	119 4 141	24.5
6.0	129 4 131	126 4 134	122 4 138	118 3 142	115 3 145	112 3 148	24.0
6.5	121 2 139	119 2 141	117 2 143	114-2 146	111-1 149	108 0 152	23.5
7.0	118-1 142	117-1 143	116-1 144	115 0 144	115 0 144	115 0 144	23.0
7.5	120 0 140	120 0 140	121+1 139	121+1 139	122+1 138	123+1 137	22.5
8.0	126+2 134	127+2 133	129 2 131	131 2 129	132 2 128	134 2 126	22.0
8.5	135 2 125	138 2 122	140 2 120	142 2 118	144 2 116	146 2 114	21.5
9.0	147 3 113	150 2 110	152 2 108	154 2 106	155+1 105	156+1 104	21.0
9.5	160 2 100	162+2 98	163+1 97	164+1 96	164 0 96	164 0 96	20.5
10.0	171+1 89	171 0 89	172 0 88	171-1 89	170-2 90	168-2 92	20.0
10.5	178-1 82	178-1 82	176-2 84	173 3 87	170 4 90	166 4 94	19.5
11.0	181 3 79	178 4 82	174 4 86	169 5 91	164 6 96	158 6 102	19.0
11.5	178 5 82	173 6 87	166 7 94	159 7 101	152 8 108	144 8 116	18.5
12.0	169 8 91	161 9 99	152 9 108	143 9 117	133 9 127	124 9 136	18.0
12.5	153 10 107	142 11 118	132 11 128	121 11 139	110 10 150	100 10 160	17.5
13.0	132 12 128	120 12 140	108 12 152	96 11 164	86 11 174	75 10 185	17.0
13.5	107 13 153	94 12 166	82 12 178	71 11 189	61 10 199	52 9 208	16.5
14.0	81 13 179	69 12 191	58 11 202	48 10 212	39 8 221	31 7 229	16.0
14.5	58 11 202	47 10 213	37 9 223	29 7 231	22 6 238	18 4 242	15.5
15.0	39 9 221	30 8 230	23 6 237	17 5 243	14-3 246	12-1 248	15.0
15.5	26 7 234	20 5 240	16-3 244	13 0 247	13 0 247	15+2 245	14.5
16.0	22-4 238	19-2 241	18 0 242	19+2 241	21+3 239	25 5 235	14.0
16.5	26 0 234	26+1 234	28+3 232	32 4 228	37 6 223	44 7 216	13.5
17.0	37+2 223	40 4 220	44 5 216	50 7 210	58 8 202	66 9 194	13.0
17.5	54 5 206	59 6 201	65 7 195	73 8 187	81 9 179	90 10 170	12.5
18.0	74 6 186	81 7 179	89 8 171	97 8 163	106 9 154	114 9 146	12.0
18.5	96 7 164	104 7 156	111 8 149	119 8 141	127 8 133	136 8 124	11.5
19.0	117 7 143	124 7 136	131 7 129	138 7 122	145 7 115	152 7 108	11.0
19.5	134 6 126	140 6 120	146 6 114	152 5 108	157 5 103	162 5 98	10.5
20.0	146 5 114	151 5 109	155 4 105	159 4 10			

TABLE 9. Vert. Arg. D. Hor. Arg. 9.

Table 9: A large table with columns for Arg., 0 v, 1 v 22, 2 v 23, 3 v 24, 4 v 25, 5 v 26, 6 v 27, 7 v 28, and Arg. It contains numerical data for various angles from -0.5 to 30.5.

TABLE 9 (concl.). Vert. Arg. D. Hor. Arg. 9.

Table 9 (concl.): Continuation of Table 9, with columns for Arg., 8 v 29, 9 v 30, 10 v 31, and Arg. It contains numerical data for angles from -0.5 to 30.5.

TABLE 10. Vert. Arg. D. Hor. Arg. 10.

Table 10: A table with columns for Arg., 0 v, 1 v 41, 2 v 42, and Arg. It contains numerical data for various angles from -0.5 to 30.5.

TABLE I (concl.). Vert. Arg. D. Hor. Arg. 10.

TABLE II. Vert. Arg. D. Hor. Arg. 11.

Table I (concl.) with columns for Arg., 19 v 59, 20 v 60, and Arg. containing numerical data for vertical and horizontal arguments.

Table II with columns for Arg., 0 v, 1 v 23, 2 v 24, 3 v 25, and Arg. containing numerical data for vertical and horizontal arguments.

TABLE II (concl.).

Vert. Arg. D.

Hor. Arg. 11.

Table II (concl.) with columns for Arg., 4 v 26, 5 v 27, 6 v 28, 7 v 29, 8 v 30, 9 v 31, 10 v 32, 11 v 33, and Arg. containing numerical data for vertical and horizontal arguments.

TABLE 12.

Vert. Arg. D.

Hor. Arg. 12.

Arg.	0 v	1 v 13	2 v 14	3 v 15	4 v 16	5 v 17	6 v 18	Arg.
d								d
-0.5	71 0	70-2 10	66-4 14	61-6 19	55-7 25	47-8 33	39-8 41	30.5
0.0	69-3	65 5 15	59 6 21	52 7 28	44 8 36	36 8 44	28 7 52	30.0
+0.5	63 5	57 7 23	49 8 31	41 8 39	33 8 47	26 7 54	19 6 61	29.5
1.0	54 7	46 8 34	38 8 42	30 8 50	23 7 57	17 5 63	12 4 68	29.0
1.5	44 8	36 8 44	28 8 52	21 6 59	15 5 65	11-3 69	9-1 71	28.5
2.0	34 8	26 7 54	19 6 61	14 4 66	10-2 70	9 0 71	9+1 71	28.0
2.5	24 7	18 6 62	13 4 67	10-2 70	9 0 71	10+2 70	13 4 67	27.5
3.0	17 5	12 4 68	10-2 70	9+1 71	11+3 69	14 4 66	20 6 60	27.0
3.5	12 3	10-1 70	10+1 70	12 3 68	16 5 64	22 6 58	28 7 52	26.5
4.0	11-1	12+1 68	14 3 66	18 5 62	23 6 57	30 7 50	37 7 43	26.0
4.5	13+2	16 3 64	20 5 60	25 6 55	32 7 48	39 7 41	46 7 34	25.5
5.0	18 3	22 5 58	28 6 52	34 6 46	40 7 40	47 6 33	53 6 27	25.0
5.5	25 5	30 5 50	36 6 44	42 6 38	48 6 32	53 5 27	58 4 22	24.5
6.0	33 5	38 5 42	44 5 36	49 5 31	54 4 26	57 3 23	60+2 20	24.0
6.5	41 5	46 5 34	50 4 30	54 3 26	57+2 23	59+1 21	59-1 21	23.5
7.0	48 4	52 3 28	55+2 25	57+1 23	58 0 22	57-1 23	56 2 24	23.0
7.5	54 2	56+2 24	57 0 23	57-1 23	55-2 25	53 3 27	50 4 30	22.5
8.0	57+1	57-1 23	56-2 24	54 3 26	51 4 29	47 4 33	42 4 38	22.0
8.5	57-1	55 2 25	52 3 28	48 4 32	44 5 36	39 5 41	35 4 45	21.5
9.0	55 3	51 4 29	46 5 34	41 5 39	36 5 44	31 5 49	27 4 53	21.0
9.5	50 5	45 6 35	39 6 41	34 6 46	28 5 52	24 4 56	20 3 60	20.5
10.0	43 6	37 6 43	31 6 49	25 5 55	21 4 59	18 2 62	16-1 64	20.0
10.5	35 7	29 6 51	23 5 57	18 4 62	15-2 65	14+1 66	14+1 66	19.5
11.0	26 6	21 5 59	16 4 64	13-2 67	12 0 68	13+2 67	15 4 65	19.0
11.5	18 5	14 4 66	11-2 69	10 0 70	12+2 68	15 4 65	20 6 60	18.5
12.0	12 3	10-1 70	10+1 70	11+3 69	15 4 65	20 6 60	27 7 53	18.0
12.5	9-1	9+1 71	11 3 69	15 5 65	21 6 59	28 7 52	36 8 44	17.5
13.0	9+2	12 4 68	16 5 64	22 7 58	30 8 50	38 8 42	46 8 34	17.0
13.5	13 4	18 6 62	24 7 56	32 8 48	40 8 40	48 8 32	56 7 24	16.5
14.0	20 6	27 7 53	34 8 46	43 8 37	51 8 29	58 7 22	64 5 16	16.0
14.5	29 8	37 8 43	45 8 35	53 7 27	60 6 20	65 5 15	69 3 11	15.5
15.0	40 8	48 8 32	56 7 24	62 6 18	67 4 13	70+2 10	71+1 9	15.0
15.5	51 8	58 7 22	64 5 16	68 3 12	71+1 9	71-1 9	69-3 11	14.5
16.0	60 6	66 5 14	69+3 11	71+1 9	71-1 9	68 3 12	64 5 16	14.0
16.5	67 4	70+2 10	71 0 9	70-2 10	67 4 13	62 6 18	56 7 24	13.5
17.0	71+2	71-1 9	70-3 10	66 5 14	61 6 19	54 7 26	46 8 34	13.0
17.5	71-1	69 3 11	65 5 15	59 6 21	52 7 28	44 8 36	36 8 44	12.5
18.0	68 3	63 5 17	57 7 23	50 8 30	42 8 38	34 8 46	27 7 53	12.0
18.5	62 5	56 7 24	48 7 32	41 8 39	33 7 47	26 7 54	20 6 60	11.5
19.0	54 6	47 7 33	39 7 41	32 7 48	25 6 55	20 5 60	15 4 65	11.0
19.5	45 7	38 7 42	31 6 49	25 6 55	20 4 60	16 3 64	14-1 66	10.5
20.0	37 6	30 6 50	25 5 55	21 4 59	17-2 63	16-1 64	16+1 64	10.0
20.5	30 5	25 4 55	21 3 59	19-2 61	18 0 62	18+1 62	20 3 60	9.5
21.0	25 3	22-2 58	20-1 60	20 0 60	21+2 59	23 3 57	27 4 53	9.0
21.5	23-1	22 0 58	22+1 58	24+2 56	27 3 53	30 4 50	35 4 45	8.5
22.0	23+1	24+2 56	26 3 54	30 4 50	34 4 46	38 4 42	42 4 38	8.0
22.5	26 2	29 3 51	33 4 47	37 4 43	42 4 38	46 4 34	50 4 30	7.5
23.0	32 4	36 4 44	41 5 39	45 4 35	49 4 31	53 3 27	56 2 24	7.0
23.5	39 5	44 5 36	49 4 31	53 4 27	56 3 24	58+2 22	59+1 21	6.5
24.0	47 5	52 5 28	56 4 24	59+2 21	61+1 19	61 0 19	60-2 20	6.0
24.5	55 5	59 3 21	62+2 18	63 0 17	63-1 17	61-2 19	58 4 22	5.5
25.0	62 3	64+2 16	66 0 14	65-2 15	62 3 18	58 5 22	53 6 27	5.0
25.5	67+2	67 0 13	66-2 14	63 4 17	59 5 21	53 6 27	46 7 34	4.5
26.0	69-1	67-3 13	64 4 16	58 6 22	52 7 28	45 7 35	37 7 43	4.0
26.5	68 3	64 5 16	58 6 22	51 7 29	44 8 36	36 8 44	28 7 52	3.5
27.0	63 5	57 7 23	50 8 30	42 8 38	34 8 46	26 7 54	20 6 60	3.0
27.5	56 7	48 8 32	40 8 40	32 8 48	25 7 55	18 6 62	13 4 67	2.5
28.0	46 8	38 8 42	30 8 50	23 7 57	17 5 63	12 4 68	9-1 71	2.0
28.5	36 8	28 8 52	21 6 59	15 5 65	11-3 69	9-1 71	9+1 71	1.5
29.0	26 7	19 6 61	14 4 66	10-2 70	9 0 71	10+2 70	12 4 68	1.0
29.5	17 5	12 4 68	10-2 70	9 0 71	10+2 70	14 4 66	19 6 61	+0.5
30.0	11-3	9-1 71	9+1 71	11+3 69	16 5 64	21 6 59	28 7 52	0.0
30.5	9 0	10+2 70	12+4 68	17+5 63	23+7 57	31+8 49	39+8 41	-0.5
Arg.	12 v	11 v 23	10 v 22	9 v 21	8 v 20	7 v 19	6 v 18	Arg.

TABLE 13.

Vert. Arg. D.

Hor. Arg. 13.

Arg.	0 v	1 v 23	2 v 24	3 v 25	4 v 26	5 v 27	6 v 28	Arg.
d								d
-0.5	76-4	71-5 49	66-5 54	62-5 58	56-5 64	52-5 68	47-5 73	30.5
0.0	78 4	74 5 46	69 5 51	64 5 56	59 5 61	54 5 66	49 5 71	30.0
+0.5	80 4	76 5 44	71 5 49	66 5 54	61 5 59	56 5 64	51 5 69	29.5
1.0	82 4	78 4 42	73 5 47	68 5 52	63 5 57	58 5 62	53 5 67	29.0
1.5	83 4	79 4 41	75 4 45	71 5 49	66 5 54	61 5 59	56 5 64	28.5
2.0	84 3	81 3 39	77 3 43	73 4 47	69 4 51	65 4 55	60 5 60	28.0
2.5	86 2	83 3 37	80 3 40	76 4 44	73 4 47	69 4 51	64 4 56	27.5
3.0	88 2	86 2 34	83 2 37	80 3 40	77 3 43	73 3 47	69 4 51	27.0
3.5	90-1	88 2 32	87 2 33	84 3 36	82 3 38	78 3 42	75 4 45	26.5
4.0	92 0	92-1 28	91 2 29	89 2 31	86 3 34	84 3 36	80 4 40	26.0
4.5	95 0	95 0 25	95 1 25	93 2 27	91 2 29	91 2 29	85 4 35	25.5
5.0	98+1	99 0 21	99-1 21	98 1 22	96 2 24	94 3 26	90 4 30	25.0
5.5	102 1	103 0 17	103 0 17	102 1 18	100 2 20	98 3 22	95 4 25	24.5
6.0	104 2	106+1 14	106 0 14	105 1 15	104 2 16	101 3 19	98 4 22	24.0
6.5	107 2	108 1 12	109 0 11	108 1 12	107 2 13	104 3 16	101 4 19	23.5
7.0	108 2	110 1 10	110 0 10	110 1 10	108 2 12	106 3 14	102 4 18	23.0
7.5	109 2	110 1 10	111 0 9	110 1 10	109 2 11	106 3 14	103 4 17	22.5
8.0	109 2	110 1 10	111 0 9	110 1 10	109 2 11	106 3 14	102 4 18	22.0
8.5	108 2	109 1 11	110 0 10	109 1 11	108 2 12	105 3 15	102 4 18	21.5
9.0	105 2	107 1 13	107 0 13	107 1 13	106 2 14	103 3 17	100 4 20	21.0
9.5	102 2	104 1 16	104 0 16	104-1 16	103 2 17	101 2 19	98 3 22	20.5
10.0	98 2	100 1 20	101 0 19	101 0 19	100 1 20	98 2 22	96 3 24	20.0
10.5	94 2	96 2 24	97+1 23	97 0 23	97-1 23	96 1 24	94 2 26	19.5
11.0	89 2	91 2 29	93 1 27	94+1 26	94 0 26	93-1 27	92 2 28	19.0
11.5	84 3	86 2 34	88 2 32	90 1 30	91+1 29	91 0 29	91-1 29	18.5
12.0	79 3	82 3 38	85 2 35	87 2 33	88 1 32	89+1 31	90 0 30	18.0
12.5	75 4	78 3 42	81 3 39	84 3 36	86 2 34	88 1 32	89+1 31	17.5
13.0	71 4	75 4 45	79 4 41	82 3 38	85 3 35	87 2 33	89 2 31	17.0
13.5	68 5	72 4 48	76 4 44	80 4 40	84 3 36	87 3 33	89 2 31	16.5
14.0	65 5	70 5 50	74 4 46	78 4 42	82 4 38	86 3 34	89 3 31	16.0
14.5	62 5	67 5 53	72 5 48	77 5 43	81 4 39	85 4 35	89 3 31	15.5
15.0	60 5	65 5 55	70 5 50	75 5 45	80 4 40	84 4 36	87 3 33	15.0
15.5	58 5	63 5 57	68 5 52	73 5 47	78 4 42	82 4 38	86 4 34	14.5
16.0	55 5	60 5 60	65 5 55	70 5 50	75 4 45	79 4 41	83 4 37	14.0
16.5	52 5	57 5 63	62 5 58	66 5 54	71 4 49	75 4 45	79 4 41	13.5
17.0	49 4	54 4 66	58 4 62	62 4 58	67 4 53	71 4 49	75 4 45	13.0
17.5	45 4	49 4 71	53 4 67	57 4 63	62 4 58	66 4 54	70 4 50	12.5
18.0	41 3	44 4 76	48 4 72	52 4 68	56 4 64	60 4 60	65 4 55	12.0
18.5	36 3	39 3 81	43 4 77	47 4 73	51 4 69	55 4 65	60 4 60	11.5
19.0	31 2	34 3 86	37 4 83	41 4 79	45 4 75	50 5 70	54 5 66	11.0
19.5	26 2	29 3 91	32 4 88	36 4 84	40 4 80	45 5 75	50 5 70	10.5
20.0	22 2	24 3 96	28 4 92	31 4 89	36 5 84	40 5 80	46 6 74	10.0
20.5	18 2	20 3 100	23 4 97	27 4 93	32 5 88	37 5 83	43 6 77	9.5
21.0	15 2	17 3 103	20 4 100	24 4 96	29 5 91	35 6 85	41 6 79	9.0
21.5	12 2	15 3 105	18 4 102	22 5 98	28 5 92	33 6 87	39 6 81	8.5
22.0	11 2	14 3 106	17 4 103	21 5 99	26 5 94	32 6 88	38 7 82	8.0
22.5	11 2	14 3 106	17 4 103	21 5 99	26 5 94	32 6 88	39 7 81	7.5
23.0	12 2	14 3 106	18 4 102	22 5 98	27 5 93	33 6 87	39 7 81	7.0
23.5	13							

TABLE 13 (concl.).

Vert. Arg. D.

Hor. Arg. 13.

Arg.	7 v 29	8 v 30	9 v 31	10 v 32	11 v 33	Arg.
d						d
-0.5	42-4 78	38-4 82	34-3 86	31-3 89	28-2 92	30.5
0.0	44 5 76	39 4 81	35 4 85	32 3 88	29 3 91	30.0
+0.5	46 5 74	41 4 79	37 4 83	33 3 87	30 3 90	29.5
1.0	48 5 72	44 4 76	40 4 81	36 4 84	32 4 88	29.0
1.5	52 5 68	47 4 73	43 4 77	39 4 81	35 3 85	28.5
2.0	55 4 65	51 4 69	47 4 73	43 4 77	39 3 81	28.0
2.5	60 4 60	56 4 64	52 4 68	47 4 73	44 4 76	27.5
3.0	65 4 55	61 4 59	57 4 63	52 4 68	48 4 72	27.0
3.5	71 4 49	66 4 54	62 4 58	58 4 62	54 4 66	26.5
4.0	76 4 44	72 4 48	68 4 52	63 5 57	58 5 62	26.0
4.5	82 4 38	77 4 43	73 5 47	68 5 52	63 5 57	25.5
5.0	86 4 34	82 5 38	77 5 43	72 5 48	67 6 53	25.0
5.5	91 4 29	86 5 34	81 5 39	76 6 44	70 6 50	24.5
6.0	94 4 26	89 5 31	84 6 36	78 6 42	72 6 48	24.0
6.5	96 5 24	92 5 28	86 6 34	80 6 40	73 7 47	23.5
7.0	98 5 22	93 5 27	87 6 33	81 6 39	74 7 46	23.0
7.5	98 5 22	93 6 27	87 6 33	81 7 39	74 7 46	22.5
8.0	98 5 22	93 6 27	87 6 33	81 7 39	74 7 46	22.0
8.5	97 5 23	92 5 28	87 6 33	80 6 40	74 7 46	21.5
9.0	96 4 24	91 5 29	86 6 34	80 6 40	74 6 46	21.0
9.5	94 4 26	90 5 30	85 5 35	80 6 40	74 6 46	20.5
10.0	93 3 27	89 4 31	85 5 35	80 5 40	74 5 46	20.0
10.5	91 3 29	88 4 32	85 4 35	80 4 40	76 5 44	19.5
11.0	90 2 30	88 3 32	85 3 35	81 4 39	78 4 42	19.0
11.5	90 1 30	88 2 32	86 2 34	83 3 37	80 3 40	18.5
12.0	90-1 30	89-1 31	87 2 33	85 2 35	83 3 37	18.0
12.5	90 0 30	89 0 30	87 2 33	85 2 35	83 3 37	17.5
13.0	90+1 30	91 0 29	87 2 33	85 2 35	83 3 37	17.0
13.5	91 2 29	92+1 28	87 2 33	85 2 35	83 3 37	16.5
14.0	91 2 29	93 1 27	87 2 33	85 2 35	83 3 37	16.0
14.5	91 2 29	94 2 26	87 2 33	85 2 35	83 3 37	15.5
15.0	90 3 30	93 2 27	87 2 33	85 2 35	83 3 37	15.0
15.5	89 3 31	92 2 28	87 2 33	85 2 35	83 3 37	14.5
16.0	86 3 34	89 3 31	87 2 33	85 2 35	83 3 37	14.0
16.5	83 3 37	86 3 34	87 2 33	85 2 35	83 3 37	13.5
17.0	79 4 41	82 3 38	87 2 33	85 2 35	83 3 37	13.0
17.5	74 4 46	78 3 42	87 2 33	85 2 35	83 3 37	12.5
18.0	69 4 51	73 4 47	87 2 33	85 2 35	83 3 37	12.0
18.5	64 4 56	68 4 52	87 2 33	85 2 35	83 3 37	11.5
19.0	59 5 61	64 5 56	87 2 33	85 2 35	83 3 37	11.0
19.5	55 5 65	60 5 60	87 2 33	85 2 35	83 3 37	10.5
20.0	52 6 68	57 6 63	87 2 33	85 2 35	83 3 37	10.0
20.5	49 6 71	55 6 65	87 2 33	85 2 35	83 3 37	9.5
21.0	47 6 73	54 6 66	87 2 33	85 2 35	83 3 37	9.0
21.5	46 7 74	53 7 67	87 2 33	85 2 35	83 3 37	8.5
22.0	45 7 75	52 7 68	87 2 33	85 2 35	83 3 37	8.0
22.5	45 7 75	52 7 68	87 2 33	85 2 35	83 3 37	7.5
23.0	46 7 74	53 7 67	87 2 33	85 2 35	83 3 37	7.0
23.5	46 7 74	53 7 67	87 2 33	85 2 35	83 3 37	6.5
24.0	46 6 74	52 6 68	87 2 33	85 2 35	83 3 37	6.0
24.5	46 6 74	51 6 69	87 2 33	85 2 35	83 3 37	5.5
25.0	45 5 75	50 5 70	87 2 33	85 2 35	83 3 37	5.0
25.5	43 4 77	48 5 72	87 2 33	85 2 35	83 3 37	4.5
26.0	41 4 79	45 4 75	87 2 33	85 2 35	83 3 37	4.0
26.5	39 3 81	42 3 78	87 2 33	85 2 35	83 3 37	3.5
27.0	35 2 85	38 3 82	87 2 33	85 2 35	83 3 37	3.0
27.5	32 2 88	34 2 86	87 2 33	85 2 35	83 3 37	2.5
28.0	29 1 91	31 2 89	87 2 33	85 2 35	83 3 37	2.0
28.5	27+1 93	28 2 92	87 2 33	85 2 35	83 3 37	1.5
29.0	25 0 95	26 1 94	87 2 33	85 2 35	83 3 37	1.0
29.5	24 0 96	24 1 96	87 2 33	85 2 35	83 3 37	+0.5
30.0	24 0 96	24+1 96	87 2 33	85 2 35	83 3 37	0.0
30.5	25-1 95	25 0 95	87 2 33	85 2 35	83 3 37	-0.5
Arg.	15 v 37	14 v 36	13 v 35	12 v 34	11 v 33	Arg.

TABLE 14.

Vert. Arg. D.

Hor. Arg. 14.

Arg.	0 v	1 v 17	2 v 18	3 v 19	4 v 20	5 v 21	6 v 22	7 v 23	8 v 24	Arg.
d										d
-0.5	9+3	12+4 68	17+5 63	23+6 57	29+6 51	36+7 44	43+7 37	50+7 30	56+6 24	30.5
0.0	18 5	23 6 57	30 7 50	36 7 44	43 7 37	50 7 30	56 6 24	62 5 18	67 4 13	30.0
+0.5	30 7	37 7 43	44 7 36	50 7 30	57 6 23	62 5 18	67 4 13	71 3 9	74+2 6	29.5
1.0	44 7	50 7 30	57 6 23	63 5 17	67 4 13	71 3 9	74+2 6	75+1 5	75-1 5	29.0
1.5	57 6	62 5 18	67 4 13	71 3 9	74+2 6	75+1 5	75-1 5	74-2 6	71 3 9	28.5
2.0	67 4	71 3 9	74+2 6	75+1 5	75-1 5	74-2 6	72 3 8	68 4 12	63 5 17	28.0
2.5	73+2	75+1 5	75 0 5	74-2 6	72 3 8	68 4 12	64 5 16	58 6 22	52 6 28	27.5
3.0	75 0	74-1 6	72-3 8	69 4 11	65 5 15	59 6 21	53 6 27	47 7 33	40 7 40	27.0
3.5	72-2	69 3 11	65 4 15	60 5 20	55 6 25	48 6 32	42 7 38	35 6 45	29 6 51	26.5
4.0	66 4	61 5 19	56 6 24	50 6 30	44 6 36	38 6 42	31 6 49	26 6 54	20 5 60	26.0
4.5	57 5	52 6 28	46 6 34	40 6 40	34 6 46	29 6 51	23 5 57	18 4 62	15 3 65	25.5
5.0	48 5	43 6 37	37 6 43	32 6 48	26 5 54	22 4 58	18 4 62	14 3 66	12-2 68	25.0
5.5	40 5	34 5 46	29 5 51	25 4 55	21 4 59	17 3 63	15-2 65	13-1 67	13 0 67	24.5
6.0	32 5	28 4 52	23 4 57	20 3 60	17 2 63	16-1 64	15 0 65	15+1 65	16+2 64	24.0
6.5	26 4	22 3 58	20 2 60	18-2 62	16-1 64	16 0 64	17+1 63	18 2 62	20 3 60	23.5
7.0	21 3	19 2 61	18-1 62	17 0 63	17+1 63	18+2 62	20 2 60	23 3 57	26 4 54	23.0
7.5	18-1	18-1 62	17 0 63	18+1 62	20 2 60	22 3 58	25 3 55	29 4 51	33 4 47	22.5
8.0	17 0	18+1 62	19+2 61	21 2 59	24 3 56	27 4 53	31 4 49	35 4 45	40 4 40	22.0
8.5	17+1	19 2 61	22 3 58	25 4 55	29 4 51	33 4 47	38 5 42	42 5 38	47 4 33	21.5
9.0	20 3	23 3 57	27 4 53	31 4 49	36 5 44	40 5 40	45 5 35	50 4 30	54 4 26	21.0
9.5	24 4	28 5 52	33 5 47	38 5 42	43 5 37	48 5 32	53 4 27	57 4 23	61 3 19	20.5
10.0	30 5	35 5 45	41 6 39	46 5 34	52 5 28	56 4 24	61 4 19	64 3 16	66+2 14	20.0
10.5	38 6	44 6 36	50 6 30	55 5 25	60 4 20	64 4 16	67 2 13	69+1 11	70 0 10	19.5
11.0	48 6	54 6 26	59 5 21	64 4 16	67 3 13	70+2 10	71+1 9	72 0 8	71-2 9	19.0
11.5	58 5	63 5 17	67 4 13	70 3 10	72+1 8	73 0 7	73-1 7	71-2 9	68 4 12	18.5
12.0	67 4	71 3 9	73+2 7	74+1 6	74-1 6	72-2 8	70 3 10	66 4 14	61 5 19	18.0
12.5	73+2	75+1 5	75 0 5	74-2 6	72 3 8	68 4 12	63 5 17	58 6 22	51 6 29	17.5
13.0	75 0	74-2 6	72-3 8	69 4 11	64 5 16	59 6 21	53 6 27	46 7 40	39 7 41	17.0
13.5	73-3	69 4 11	65 5 15	60 6 20	53 6 27	47 7 33	40 7 40	33 7 47	26 6 54	16.5
14.0	65 5	60 6 20	54 6 26	47 7 33	40 7 40	33 7 47	27 6 53	21 6 59	15 5 65	16.0
14.5	54 6	47 7 33	40 7 40	33 7 47	27 6 53	21 6 59	15 5 65	11 4 69	8-3 72	15.5
15.0	40 7	33 7 47	27 6 53	21 6 59	15 5 65	11 4 69	8-3 72	6-1 74	5 0 75	15.0
15.5	26 6	20 6 60	15 5 65	11 4 69	8-3 72	6-1 74	5 0 75	6+1 74	8+3 72	14.5
16.0	15 5	11 4 69	7-3 73	5-1 75	5 0 75	6+1 74	8+3 72	11 4 69	15 5 65	14.0
16.5	7-3	5-1 75	5 0 75	5+1 75	7+3 73	10 4 70	15 5 65	20 6 60	26 6 54	13.5
17.0	5 0	5+1 75	7+2 73	10 4 70	14 5 66	20 6 60	26 6 54	32 7 48	39 7 41	13.0
17.5	7+2	10 3 70	14 5 66	19 6 61	24 6 56	31 7 49	38 7 42	45 7 35	51 6 29	12.5
18.0	13 4	18 5 62	23 6 57	29 6 51	36 7 44	42 7 38	49 6 31	55 6 25	61 5 19	12.0
18.5	22 5	28 6 52	34 6 46	40 6 40	47 6 33	54 6 27	59 5 21	64 4 16	68 4 12	11.5
19.0	32 6	38 6 42	44 6 36	50 6 30	56 5 24	61 5 19	65 4 15	68 3 12	71+2 9	11.0
19.5	42 6	47 6 33	53 5 27	58 5 22	62 4 18	66 3 14	68+2 12	70+1 10	70 0 10	10.5
20.0	50 5	55 5 25	59 4 21	63 3 17	66					

TABLE 15.

Vert. Arg. D.

Hor. Arg. 15.

Arg.	0 v	1 v 15	2 v 16	3 v 17	4 v 18	5 v 19	6 v 20	7 v 21	Arg.
-0.5	40+9	49+9 71	59+10 61	68+10 52	78+9 42	86+8 34	93+6 27	98+4 22	d 30.5
0.0	51 10	61 10 59	71 10 49	80 9 40	89 8 31	96 6 24	101 4 19	104+2 16	30.0
+0.5	64 10	74 9 46	83 8 37	91 7 29	97 5 23	102 3 18	104+1 16	104-1 16	29.5
1.0	76 9	85 8 35	92 6 28	98 5 22	102+3 18	103+1 17	100 4 20	100 4 20	29.0
1.5	86 7	93 6 27	97 4 23	100+2 20	101 0 19	100-2 20	96 4 24	91 6 29	28.5
2.0	93 4	96+3 24	98+1 22	98-1 22	96-3 24	92 5 28	86 6 34	80 7 40	28.0
2.5	95+1	96-1 24	94-2 26	91 4 29	86 5 34	80 7 40	73 7 47	66 8 54	27.5
3.0	93-2	90 4 30	86 5 34	81 6 39	74 7 46	67 8 53	59 8 61	52 7 68	27.0
3.5	87 5	81 6 39	75 7 45	67 7 53	60 8 60	52 8 68	45 7 75	38 6 82	26.5
4.0	77 7	69 8 51	61 8 59	53 8 67	45 7 75	38 6 82	32 5 88	28 4 92	26.0
4.5	64 9	55 9 65	46 8 74	38 7 82	32 6 88	26 5 94	22-3 98	21-1 99	25.5
5.0	50 9	41 9 79	32 8 88	26 6 94	21 4 99	17-2 103	16 0 104	18+2 102	25.0
5.5	36 9	28 8 92	21 6 99	16 4 104	13-2 107	12+1 108	14+3 106	19 5 101	24.5
6.0	24 8	16 6 104	12 4 108	9-1 111	9+1 111	12 4 108	17 6 103	24 8 96	24.0
6.5	13 6	8 4 112	6-1 114	6+2 114	9 4 111	15 7 105	23 9 97	32 10 88	23.5
7.0	6 4	4-1 116	4+2 116	8 4 112	13 7 107	22 9 98	32 11 88	43 12 77	23.0
7.5	3-1	4+2 116	7 5 113	13 7 107	21 9 99	31 11 89	32 12 77	56 13 64	22.5
8.0	4+2	7 5 113	13 7 107	21 9 99	31 11 89	43 12 77	55 13 65	68 12 52	22.0
8.5	8 4	14 7 106	22 9 98	32 11 88	44 12 76	56 12 64	68 12 52	80 12 40	21.5
9.0	17 7	24 9 96	34 10 86	45 11 75	57 12 63	68 12 52	80 11 40	90 10 30	21.0
9.5	28 8	37 10 83	47 11 73	58 11 62	69 11 51	80 10 40	90 9 30	98 7 22	20.5
10.0	41 9	51 10 69	61 10 59	71 10 49	80 9 40	89 8 31	96 6 24	101 4 19	20.0
10.5	55 9	64 9 56	73 9 47	82 8 38	89 6 31	95 5 25	99+3 21	101+1 19	19.5
11.0	69 8	77 8 43	84 6 36	90 5 30	94+4 26	97+2 23	98 0 22	97-2 23	19.0
11.5	81 6	86 5 34	91+4 29	94+2 26	95 0 25	94-1 26	92-3 28	88 5 32	18.5
12.0	90 4	93+2 27	94 0 26	94-1 26	92-3 28	88 4 32	83 6 37	77 7 43	18.0
12.5	95+1	95-1 25	93-3 27	89 4 31	84 6 36	78 7 42	71 7 49	63 8 57	17.5
13.0	95-2	92 4 28	87 6 33	81 7 39	73 8 47	65 8 55	57 8 63	49 8 71	17.0
13.5	92 5	85 7 35	78 8 42	70 9 50	61 9 57	52 9 68	43 8 77	36 7 84	16.5
14.0	84 8	75 9 45	66 9 54	56 9 64	47 9 73	38 8 82	31 7 89	25 5 95	16.0
14.5	72 9	63 10 57	53 10 67	44 9 76	35 8 85	27 7 93	22 5 98	18-3 102	15.5
15.0	60 10	50 10 70	41 9 79	32 8 88	25 6 95	20 4 100	16-2 104	15 0 105	15.0
15.5	48 9	38 9 82	30 7 90	24 6 96	19 4 101	17-2 103	16+1 104	18+3 102	14.5
16.0	36 8	29 6 91	23 5 97	20-3 100	18-1 102	18+1 102	20 3 100	25 5 95	14.0
16.5	28 5	24 4 96	21-2 99	20 0 100	21+2 99	24 4 96	29 6 91	36 7 84	13.5
17.0	25-2	23-1 97	23+1 97	25+3 95	29 5 91	35 6 85	41 7 79	49 8 71	13.0
17.5	25+1	27+2 93	30 4 90	35 5 85	41-7 72	48 7 72	55 8 65	63 8 57	12.5
18.0	30 4	35 5 85	40 6 80	47 7 73	54 8 66	62 8 58	70 7 50	77 7 43	12.0
18.5	39 6	46 7 74	54 8 66	61 8 59	69 8 51	76 7 44	83 6 37	88 5 32	11.5
19.0	51 8	59 8 61	68 8 52	76 8 44	83 7 37	89 5 31	94 4 26	97+2 23	11.0
19.5	65 9	74 9 46	82 8 38	90 6 30	95 5 25	99+3 21	101+1 19	101-1 19	10.5
20.0	79 9	88 8 32	95 6 25	101 5 19	104+2 16	105 0 15	104-2 16	101 4 19	10.0
20.5	92 8	100 7 20	105 4 15	109+2 11	110 0 10	108-3 12	104 5 16	98 7 22	9.5
21.0	103 7	109 4 11	112+2 8	113-1 7	111-3 9	106 6 14	99 8 21	90 10 30	9.0
21.5	112 4	115+2 5	115-1 5	113 4 7	108 6 12	100 8 20	91 10 29	80 12 40	8.5
22.0	116+2	117-1 3	114 4 6	109 6 11	101 9 19	92 10 28	80 12 40	68 12 52	8.0
22.5	117-1	114 4 6	109 6 11	102 9 18	92 11 28	81 12 39	68 13 52	56 13 64	7.5
23.0	114 4	108 6 12	101 9 19	91 10 29	80 12 40	68 12 52	55 12 65	43 12 77	7.0
23.5	107 6	99 8 21	90 10 30	79 11 41	67 12 53	55 12 65	43 11 77	32 10 88	6.5
24.0	96 8	87 10 33	77 11 43	66 11 54	54 11 66	43 11 77	33 10 87	24 8 96	6.0
24.5	84 9	74 10 46	64 11 56	53 10 67	43 10 77	33 9 87	25 7 95	19 5 101	5.5
25.0	70 9	60 10 60	51 9 69	42 9 78	33 8 87	26 6 94	21 4 99	18-2 102	5.0
25.5	56 9	47 8 73	39 8 81	32 6 88	27 5 93	23-3 97	21-1 99	21+1 99	4.5
26.0	43 7	37 6 83	31 5 89	27-3 93	24-2 96	24 0 96	25+2 95	28 4 92	4.0
26.5	33 5	29-3 91	27-2 89	26 0 94	26+2 94	29+3 91	33 5 87	38 6 82	3.5
27.0	27-2	26 0 94	26+2 94	29+3 91	33 5 87	38 6 82	44 7 76	52 7 68	3.0
27.5	25+1	27+3 93	30 5 90	36 6 84	42 7 78	50 8 70	58 8 62	66 8 54	2.5
28.0	27 4	32 6 88	39 7 81	46 8 74	55 8 65	63 9 57	72 8 48	80 7 40	2.0
28.5	34 7	41 8 79	50 9 70	59 9 61	68 9 52	77 8 43	85 7 35	91 6 29	1.5
29.0	44 9	53 10 67	62 10 58	72 9 48	81 8 39	89 7 31	95 6 25	100 4 20	1.0
29.5	56 10	66 10 54	75 9 45	84 8 36	92 7 28	98 5 22	102+3 18	104+1 16	+0.5
30.0	69 10	78 9 42	87 8 33	94 6 26	100 5 20	103+2 17	104 0 16	104-2 16	0.0
30.5	80+9	88+7 32	95+6 25	100+4 20	103+2 17	103 0 17	102-2 18	98-4 22	-0.5
Arg.	14 v	13 v 27	12 v 26	11 v 25	10 v 24	9 v 23	8 v 22	7 v 21	Arg.

TABLE 16.

Vert. Arg. D.

Hor. Arg. 16.

Arg.	0 v	1 v	2 v	3 v	4 v	5 v	6 v	Arg.
-0.5	4227+91	4319+95 5681	4416+99 5584	4517+102 5483	4621+105 5379	4728+108 5272	4838+111 5162	d 30.5
0.0	4105 93	4200 97 5800	4299 100 5701	4401 104 5599	4506 106 5494	4614 109 5386	4723 110 5277	30.0
+0.5	3963 96	4061 100 5939	4162 103 5838	4267 106 5733	4374 108 5626	4483 110 5517	4594 112 5406	29.5
1.0	3821 101	3923 104 6077	4029 107 5971	4137 109 5863	4248 112 5752	4360 113 5640	4474 114 5526	29.0
1.5	3700 106	3808 109 6192	3918 112 6082	4032 114 5968	4147 116 5853	4263 117 5737	4381 118 5619	28.5
2.0	3618 113	3732 116 6268	3849 118 6151	3968 119 6032	4088 121 5912	4210 121 5791	4331 121 5669	28.0
2.5	3590 120	3712 122 6288	3835 123 6165	3959 125 6041	4084 125 5916	4209 125 5791	4333 124 5667	27.5
3.0	3623 126	3750 127 6250	3877 128 6123	4005 128 5995	4134 128 5866	4261 127 5739	4387 125 5613	27.0
3.5	3714 130	3845 130 6155	3975 130 6025	4105 130 5895	4234 128 5766	4362 126 5638	4487 124 5513	26.5
4.0	3857 131	3988 131 6012	4118 129 5882	4246 128 5754	4374 126 5626	4498 123 5502	4620 120 5380	26.0
4.5	4037 129	4166 128 5834	4292 126 5708	4417 123 5583	4539 120 5461	4657 117 5343	4772 113 5228	25.5
5.0	4243 124	4367 122 5633	4488 119 5512	4605 116 5395	4719 112 5281	4829 108 5171	4936 104 5064	25.0
5.5	4466 118	4582 114 5418	4695 111 5305	4804 107 5196	4909 103 5091	5010 98 4990	5106 93 4894	24.5
6.0	4793 110	4810 106 5190	4914 102 5086	5014 98 4986	5110 93 4890	5201 88 4799	5286 83 4714	24.0
6.5	4953 102	5053 98 4947	5149 93 4851	5240 89 4760	5326 84 4674	5408 79 4592	5484 73 4516	23.5
7.0	5224 95	5317 91 4683	5405 86 4595	5488 81 4512	5566 76 4434	5639 70 4361	5707 65 4293	23.0
7.5	5520 89	5607 84 4393	5689 79 4311	5766 74 4234	5837 68 4163	5902 62 4098	5961 57 4039	22.5
8.0	5844 84	5925 79 4075	6001 73 3999	6072 67 3928	6136 61 3864	6194 55 3806	6246 49 3754	22.0
8.5	6188 79	6264 73 3736	6333 66 3667	6396 60 3604	6453 53 3547	6503 47 3497	6547 41 3453	21.5
9.0	6534 72	6602 65 3398	6663 58 3337	6717 51 3283	6765 44 3235	6805 37 3195	6839 30 3161	21.0
9.5	6852 62	6910 54 3090	6960 46 3040	7003 39 2997	7039 32 2961	7067 24 2933	7087 17 2913	20.5
10.0	7109 48	7153 40 2847	7189 32 2811	7217 24 2783	7237 16 2763	7250 9 2750	7256 2 2744	20.0
10.5	7270 31	7297 23 2703	7316 15 2684	7326 7 2674	7329 1 2671	7325		

TABLE 16 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	7	8	9	10	11	12	13	Arg.
<i>d</i>								<i>d</i>
-0.5	4949 +112	5051	5062 +113	4938	5176 +114	4824	5291 +115	4709
0.0	4835	112	5165	4947	113	5053	5060	113
+0.5	4706	113	5294	4820	113	5180	4933	113
1.0	4588	115	5412	4703	115	5297	4818	114
1.5	4498	118	5502	4616	117	5384	4733	116
2.0	4452	121	5548	4572	120	5428	4692	118
2.5	4457	123	5543	4580	121	5420	4700	119
3.0	4512	124	5488	4635	121	5365	4755	118
3.5	4610	121	5390	4730	118	5270	4846	114
4.0	4738	116	5262	4852	112	5148	4962	108
4.5	4883	109	5117	4990	104	5010	5091	99
5.0	5037	99	4963	5134	94	4866	5225	88
5.5	5197	88	4803	5282	83	4718	5362	77
6.0	5367	78	4633	5442	72	4558	5511	66
6.5	5554	68	4446	5619	62	4381	5678	56
7.0	5768	59	4232	5824	53	4176	5875	47
7.5	6016	51	3984	6063	45	3937	6105	39
8.0	6292	43	3708	6332	37	3668	6366	31
8.5	6585	34	3415	6615	28	3385	6640	21
9.0	6865	23	3135	6885	16	3115	6898 + 10	11
9.5	7101 + 10	2899	7108 + 3	2892	7107 - 3	2893	7101 - 10	2899
10.0	7254 - 5	2746	7245 - 12	2755	7230	18	2770	7209
10.5	7295	22	2705	7270	28	2730	7239	34
11.0	7207	38	2793	7167	43	2833	7122	48
11.5	6997	51	3003	6944	55	3056	6886	59
12.0	6686	61	3314	6623	64	3377	6558	66
12.5	6312	66	3688	6245	68	3755	6177	68
13.0	5917	68	4083	5849	67	4151	5782	66
13.5	5534	66	4466	5469	64	4531	5407	61
14.0	5184	61	4816	5124	59	4876	5067	55
14.5	4869	56	5131	4814	53	5186	4764	48
15.0	4576	51	5424	4527	47	5473	4482	42
15.5	4287	45	5713	4244	40	5756	4207	34
16.0	3991	37	6009	3957	31	6043	3928	25
16.5	3689	26	6311	3666	20	6334	3630 - 13	6350
17.0	3400 - 12	6600	3391 - 5	6609	3391 + 3	6609	3391 + 3	6609
17.5	3153 + 6	6847	3164 + 14	6836	3182	23	6818	3209
18.0	2983	27	7017	3015	36	6985	3056	45
18.5	2919	49	7081	2973	58	7027	3036	67
19.0	2975	70	7025	2970	79	6950	3132	87
19.5	3147	88	6853	3238	96	6762	3338	103
20.0	3415	101	6585	3519	108	6481	3630	114
20.5	3751	109	6249	3862	115	6138	3980	120
21.0	4120	113	5880	4236	118	5704	4356	122
21.5	4497	114	5503	4613	118	5387	4733	122
22.0	4862	115	5138	4978	118	5022	5098	121
22.5	5207	116	4793	5324	118	4676	5442	120
23.0	5530	117	4470	5648	119	4352	5768	120
23.5	5836	120	4104	5956	121	4044	6078	122
24.0	6126	123	3874	6249	124	3751	6372	123
24.5	6399	126	3601	6525	125	3475	6649	124
25.0	6650	127	3350	6776	125	3224	6899	123
25.5	6867	125	3133	6991	122	3009	7111	119
26.0	7038	120	2962	7156	116	2844	7271	112
26.5	7150	112	2830	7260	108	2740	7366	103
27.0	7194	103	2806	7294	98	2706	7390	92
27.5	7168	93	2832	7258	87	2742	7343	81
28.0	7081	83	2919	7161	77	2839	7234	71
28.5	6943	74	3057	7014	68	2986	7079	62
29.0	6775	67	3225	6839	61	3161	6896	54
29.5	6596	61	3404	6654	55	3346	6706	49
30.0	6426	56	3574	6479	50	3521	6526	44
30.5	6280 + 52	3720	6328 + 45	3672	6370 + 39	3630	6406 + 32	3594
Arg.	v 244		v 243		v 242		v 241	
								v 240
								v 239
								v 238
								Arg.

TABLE 16 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	14	15	16	17	18	19	20	Arg.
<i>d</i>								<i>d</i>
-0.5	5746 +111	4254	5856 +109	4144	5964 +107	4036	6069 +104	3931
0.0	5618	108	4382	5725	106	4275	5829	103
+0.5	5487	106	4513	5592	104	4408	5694	100
1.0	5373	106	4627	5477	102	4523	5577	99
1.5	5292	105	4708	5395	101	4605	5494	97
2.0	5253	104	4747	5354	100	4646	5452	95
2.5	5256	101	4744	5355	96	4645	5449	91
3.0	5296	97	4704	5390	91	4610	5478	85
3.5	5360	89	4640	5446	83	4554	5527	77
4.0	5436	80	4564	5513	74	4487	5583	67
4.5	5514	69	4486	5580	63	4420	5640	56
5.0	5592	58	4408	5647	51	4353	5694	45
5.5	5673	47	4327	5717	40	4283	5754	34
6.0	5768	36	4232	5801	30	4199	5828	24
6.5	5886	27	4114	5911	21	4098	5929	16
7.0	6039	19	3991	6055	13	3945	6066	8
7.5	6229	11	3771	6237 + 5	3793	6240 + 1	3760	6238 - 4
8.0	6446 + 2	3554	6446 - 3	3554	6440 - 8	3560	6430	12
8.5	6671 - 8	3329	6661	13	3339	6646	17	3354
9.0	6873	19	3127	6852	24	3148	6826	28
9.5	7016	31	2984	6983	36	3017	6945	40
10.0	7070	44	2930	7024	48	2976	6974	51
10.5	7012	55	2988	6956	57	3044	6897	60
11.0	6838	63	3162	6775	64	3223	6710	65
11.5	6565	67	3435	6499	66	3501	6433	65
12.0	6223	66	3777	6158	64	3842	6096	61
12.5	5850	60	4150	5791	57	4209	5736	53
13.0	5482	52	4518	5432	47	4568	5388	42
13.5	5144	41	4856	5106	36	4894	5073	30
14.0	4847	31	5153	4819	25	5181	4797	18
14.5	4585	21	5415	4567	15	5433	4555 - 8	5445
15.0	4344	12	5656	4336 - 5	5664	4335 + 2	5665	4340 + 9
15.5	4113 - 2	5887	4115 + 5	5885	4124	13	5876	4140
16.0	3888 + 10	6112	3902	18	6098	3924	25	6076
16.5	3679	25	6321	3708	33	6292	3745	41
17.0	3507	44	6493	3555	52	6445	3611	60
17.5	3401	65	6599	3499	73	6531	3547	81
18.0	3384	87	6616	3475	94	6525	3573	102
18.5	3472	107	6528	3582	114	6418	3700	121
19.0	3661	123	6339	3787	130	6213	3920	135
19.5	3936	135	6064	4073	139	5927	4214	144
20.0	4270	140	5730	4412	144	5588	4557	147
20.5	4636	140	5304	4778	143	5222	4922	145
21.0	5009	137	4991	5147	139	4853	5287	140
21.5	5373	132	4627	5506	133	4494	5639	133
22.0	5722	127	4278	5849	127	4151	5976	127
22.5	6054	123	3946	6177	122	3823	6299	121
23.0	6373	120	3627	6492	118	3508	6610	117
23.5	6680	118	3320	6797	115	3203	6911	113
24.0	6973	115	3027	7086	112	2914	7197	108
24.5	7242	111	2758	7351	107	2649	7456	103
25.0	7474	105	2526	7576	100	2424	7673	95
25.5	7654	96	2346	7748	90	2252	7835	84
26.0	7768	85	2232	7851	79	2149	7926	72
26.5	7809	73	2101	7878	66	2122	7940	58
27.0	7773	60	2227	7829	52	2171	7877	45
27.5	7667	47	2333	7710	39	2290	7740	32
28.0	7505	37	2495	7538	29	2462	7563	22
28.5	7305							

TABLE 16 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	21	v	22	v	23	v	24	v	25	v	26	v	27	v	Arg.
d															d
-0.5	6454+	88 3546	6540+	83 3460	6620+	78 3380	6695+	72 3305	6765+	66 3235	6828+	60 3172	6885+	54 3115	30.5
0.0	6297	83 3703	6378	78 3622	6453	72 3547	6522	67 3478	6586	61 3414	6643	54 3357	6695	48 3305	30.0
+0.5	6146	79 3854	6222	73 3778	6293	68 3707	6358	62 3642	6417	56 3583	6470	50 3530	6516	43 3484	29.5
1.0	6017	75 3983	6089	70 3911	6156	64 3844	6217	58 3783	6272	51 3728	6320	45 3680	6362	38 3638	29.0
1.5	5920	72 4080	5989	66 4011	6052	59 3948	6108	53 3892	6158	46 3842	6200	40 3800	6237	33 3763	28.5
2.0	5860	67 4140	5924	60 4076	5981	54 4019	6031	47 3969	6074	40 3926	6111	33 3889	6141	26 3859	28.0
2.5	5831	60 4169	5888	53 4112	5938	46 4062	5981	39 4019	6017	32 3983	6046	25 3954	6067	18 3933	27.5
3.0	5824	52 4176	5873	45 4127	5914	38 4086	5948	31 4052	5975	23 4025	5995	16 4005	6007+	9 3993	27.0
3.5	5827	42 4173	5866	35 4134	5897	28 4103	5922	21 4078	5939	14 4061	5949+	7 4051	5953	0 4047	26.5
4.0	5832	32 4168	5860	25 4140	5882	18 4118	5896	11 4104	5904+	4 4096	5904-	2 4096	5899-	8 4101	26.0
4.5	5834	22 4166	5852	15 4148	5863+	8 4137	5869+	2 4131	5868-	4 4132	5860	10 4140	5847	16 4153	25.5
5.0	5835	12 4165	5844+	6 4156	5847	0 4153	5844-	6 4156	5836	11 4164	5822	16 4178	5804	21 4196	25.0
5.5	5847+	4 4153	5848-	2 4152	5843-	7 4157	5834	12 4166	5820	16 4180	5802	20 4198	5779	24 4221	24.5
6.0	5879-	3 4121	5873	8 4127	5863	12 4137	5849	16 4151	5831	20 4169	5809	23 4191	5785	26 4215	24.0
6.5	5944	9 4056	5933	13 4067	5918	16 4082	5900	20 4100	5879	23 4121	5854	25 4146	5828	27 4172	23.5
7.0	6048	14 3952	6032	18 3968	6013	21 3987	5991	23 4009	5966	26 4034	5939	27 4061	5911	29 4089	23.0
7.5	6188	20 3812	6166	23 3834	6142	26 3858	6115	28 3885	6087	29 3913	6057	31 3943	6025	32 3975	22.5
8.0	6351	27 3649	6322	29 3678	6292	31 3708	6260	33 3740	6226	34 3774	6191	35 3809	6156	35 3844	22.0
8.5	6512	35 3488	6476	37 3524	6438	38 3562	6399	40 3601	6358	40 3642	6318	41 3682	6277	40 3723	21.5
9.0	6642	43 3358	6597	45 3403	6552	46 3448	6506	47 3494	6459	46 3541	6412	46 3588	6367	45 3633	21.0
9.5	6711	52 3289	6659	52 3341	6606	53 3394	6554	52 3440	6502	51 3498	6451	50 3549	6402	48 3598	20.5
10.0	6696	58 3304	6639	57 3361	6582	57 3418	6525	56 3475	6471	53 3529	6418	51 3582	6369	48 3631	20.0
10.5	6589	61 3411	6529	59 3471	6471	57 3528	6416	54 3584	6363	51 3637	6313	47 3687	6268	43 3732	19.5
11.0	6394	59 3606	6337	56 3663	6283	52 3717	6233	48 3767	6187	44 3813	6145	39 3855	6109	33 3891	19.0
11.5	6134	52 3866	6084	47 3916	6039	42 3961	5999	37 4001	5964	32 4036	5936	26 4064	5913	19 4087	18.5
12.0	5836	40 4164	5799	35 4201	5767	29 4233	5741	22 4259	5722	16 4278	5710-	9 4290	5704-	2 4296	18.0
12.5	5535	26 4465	5512	20 4488	5496-	12 4504	5487-	5 4513	5485+	2 4515	5490+	9 4510	5503+	16 4497	17.5
13.0	5253-	10 4747	5246-	3 4754	5247+	4 4753	5254+	11 4750	5270	19 4730	5292	26 4708	5322	34 4678	17.0
13.5	5000+	4 4994	5014+	12 4986	5030	19 4970	5052	27 4948	5083	34 4917	5120	41 4880	5166	49 4834	16.5
14.0	4793	17 5207	4814	25 5186	4842	32 5158	4878	40 5122	4922	47 5078	4972	54 5028	5029	61 4971	16.0
14.5	4607	29 5393	4639	36 5361	4679	43 5321	4726	50 5274	4780	57 5220	4840	64 5160	4908	71 5092	15.5
15.0	4438	39 5562	4481	47 5519	4531	54 5469	4588	61 5412	4652	67 5348	4722	74 5278	4799	80 5201	15.0
15.5	4282	50 5718	4336	58 5664	4397	65 5603	4466	72 5534	4540	78 5460	4622	84 5378	4709	90 5291	14.5
16.0	4148	64 5852	4215	71 5785	4289	78 5711	4370	84 5630	4458	91 5542	4551	96 5449	4650	102 5350	14.0
16.5	4049	80 5951	4132	86 5868	4222	93 5778	4318	100 5682	4421	105 5579	4529	111 5471	4642	116 5358	13.5
17.0	4008	98 5992	4109	104 5891	4216	110 5784	4330	116 5670	4449	121 5551	4573	126 5427	4701	130 5299	13.0
17.5	4044	116 5956	4164	123 5836	4289	128 5711	4420	133 5580	4555	137 5445	4694	141 5306	4837	144 5163	12.5
18.0	4168	134 5832	4305	139 5695	4446	143 5554	4592	147 5408	4741	151 5259	4893	153 5107	5048	155 4952	12.0
18.5	4377	148 5623	4526	152 5474	4680	155 5320	4836	158 5164	4995	160 5005	5155	161 4845	5317	162 4683	11.5
19.0	4654	156 5346	4812	159 5188	4972	161 5028	5133	162 4867	5296	163 4704	5459	163 4541	5621	162 4379	11.0
19.5	4978	159 5022	5137	160 4863	5297	160 4703	5458	161 4542	5619	160 4381	5778	159 4222	5936	157 4064	10.5
20.0	5320	155 4686	5476	155 4524	5631	155 4369	5786	154 4214	5939	152 4061	6090	150 3910	6239	147 3761	10.0
20.5	5662	148 4338	5809	147 4191	5956	146 4044	6100	144 3900	6243	141 3757	6382	138 3618	6519	134 3481	9.5
21.0	5988	138 4012	6126	136 3874	6261	134 3739	6394	131 3606	6524	128 3476	6650	124 3359	6773	120 3227	9.0
21.5	6297	128 3703	6424	125 3576	6548	122 3452	6669	119 3331	6786	115 3214	6899	111 3101	7009	107 2991	8.5
22.0	6593	118 3407	6709	115 3291	6823	112 3177	6933	108 3067	7038	103 2962	7140	99 2860	7236	94 2764	8.0
22.5	6879	109 3121	6987	106 3013	7091	102 2909	7191	98 2809	7286	93 2714	7377	88 2623	7463	83 2537	7.5
23.0	7160	102 2840	7260	98 2740	7355	93 2645	7446	88 2554	7531	83 2469	7612	78 2388	7687	72 2313	7.0
23.5	7432	94 2568	7524	89 2476	7611	84 2389	7692	79 2308	7768	73 2232	7839	67 2161	7903	61 2097	6.5
24.0	7686	86 2314	7769	80 2231	7846	74 2154	7918	68 2082	7983	62 2017	8042	56 1958	8094	49 1906	6.0
24.5	7905	75 2095	7978	69 2022	8044	63 1956	8103	56 1897	8156	49 1844	8201	42 1799	8239	35 1761	5.5
25.0	8072	63 1928	8132	56 1868	8185	49 1815	8230	42 1770	8268	34 1732	8299	27 1701	8322	19 1678	5.0
25.5	8172	49 1828	8218	42 1782	8256	34 1744	8286	26 1714	8308	18 1692	8323+	9 1677	8329+	2 1671	4.5
26.0	8193	34 1807	8224	26 1776	8246	18 1754	8260+	10 1740	8266+	2 1734	8265-	6 1735	8255-	14 1745	4.0
26.5	8135	19 1865	8150+	11 1850	8158+	3 1842	8157-	5 1843	8148-	13 1852	8131	20 1869	8107	28 1893	3.5
27.0	8004+	6 1996	8005-	2 1995	7999-	10 2001	7985	18 2015	7963	25 2037	7934	33 2066	7898	40 2102	3.0
27.5	7812-	6 2188	7803	13 2197	7786	21 2214	7761	28 2239	7729	35 2271	7691	42 2309	7646	48 2354	2.5
28.0	7580	15 2420	7562	22 2438	7537	29 2463	7504	35 2496	7466	42 2534	7421	48 2579	7370	54 2630	2.0
28.5	7326	21 2674	7302	28 2698	7271	34 2729	7233	40 2767	7190	46 2810	7142	51 2858	7088	57 2912	1.5
29.0	7066	26 2934	7037	32 2963	7003	38 2997	6962	43 3038	6916	48 3084	6866	53 3134	6810	58 3190	1.0
29.5	6814	29 3186	6782	35 3218	6744	40 3256	6701	45 3299	6654	50 3346	6601	54 3399	6545	58 3455	+0.5
30.0	6579	33 3421	6543	38 3457	6502	43 3498	6457	48 3543	6407	52 3593	6352	56 3648	6295	60 3705	0.0
30.5	6363	37 3637	6324-	42 3676	6279-	47 3721	6231-	51 3769	6178-	55 3822	6121-	58 3879	6061-	61 3939	-0.5
Arg.															

TABLE 16 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

TABLE 16 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	49	v	50	v	51	v	52	v	53	v	54	v	55	v	Arg.							
d	6532 - 72	3468	6459 - 74	3541	6384 - 76	3616	6307 - 78	3693	6228 - 78	3772	6150 - 79	3850	6071 - 79	3929	d							
-0.5	6269	70	3731	6198	72	3802	6126	73	3874	6052	74	3948	5977	74	4023	5903	74	4097	5829	73	4171	30.0
0.0	6020	69	3980	5950	70	4050	5879	71	4121	5808	71	4192	5737	71	4263	5667	70	4333	5598	69	4402	29.5
+0.5	5784	69	4216	5715	69	4285	5646	69	4354	5576	69	4424	5508	68	4492	5441	66	4559	5376	64	4624	29.0
1.0	5503	68	4437	5495	68	4505	5427	67	4573	5360	66	4640	5295	64	4705	5232	62	4768	5171	59	4829	28.5
1.5	5364	67	4636	5297	66	4703	5232	64	4768	5169	62	4831	5108	59	4892	5050	56	4950	4996	52	5004	28.0
2.0	5194	63	4806	5132	62	4868	5071	59	4929	5014	56	4986	4960	52	5040	4910	48	5090	4864	43	5136	27.5
2.5	5064	57	4936	5008	54	4992	4956	50	5044	4908	46	5092	4864	42	5136	4825	36	5175	4791	31	5209	27.0
3.0	4985	47	5015	4940	43	5060	4899	38	5101	4863	33	5137	4832	28	5168	4807	22	5193	4788 - 16	5212	26.5	
3.5	4963	34	5037	4931	29	5069	4905	24	5095	4884 - 18	5116	4869 - 11	5131	4861 - 5	5139	4860 + 2	5140	4860 + 2	5140	26.0		
4.0	5001	19	4999	4984 - 13	5016	4975 - 7	5025	4971	0	5029	4974 + 6	5026	4984 + 13	5016	5001	21	4999	25.5				
4.5	5094 - 2	4906	5095 + 4	4995	5102 + 10	4898	5116 + 17	4884	5136	24	4864	5164	31	4836	5198	38	4802	25.0				
5.0	5234 + 13	4766	5250	19	4750	5273	26	4727	5302	33	4662	5338	40	4662	5382	47	4662	24.5				
5.5	5403	27	4597	5433	33	4567	5469	39	4531	5512	46	4488	5561	52	4439	5616	59	4384	5678	65	4322	24.0
6.0	5586	37	4414	5626	43	4374	5672	49	4328	5724	55	4276	5783	62	4217	5847	67	4153	5917	73	4083	23.5
6.5	5768	44	4232	5815	50	4185	5867	56	4133	5926	61	4074	5990	67	4010	6059	72	3941	6134	77	3866	23.0
7.0	5936	48	4064	5987	54	4013	6044	59	3956	6105	64	3895	6172	70	3828	6245	74	3755	6321	79	3679	22.5
7.5	6086	51	3914	6140	56	3860	6198	61	3802	6262	66	3738	6331	71	3669	6404	75	3596	6481	79	3519	22.0
8.0	6218	53	3782	6274	58	3726	6335	63	3665	6400	68	3600	6470	72	3530	6544	76	3456	6622	79	3378	21.5
8.5	6340	57	3660	6399	62	3601	6463	66	3537	6532	70	3468	6604	74	3396	6679	77	3321	6757	80	3243	21.0
9.0	6459	62	3541	6524	67	3476	6592	70	3408	6664	74	3336	6740	77	3260	6818	79	3182	6898	81	3102	20.5
9.5	6584	70	3416	6656	73	3344	6730	76	3270	6808	79	3192	6887	80	3113	6968	82	3032	7051	83	2949	20.0
10.0	6718	78	3282	6797	80	3203	6878	82	3122	6961	84	3039	7045	84	2955	7130	84	2870	7214	84	2786	19.5
10.5	6856	86	3144	6943	87	3057	7031	88	2969	7119	88	2881	7206	87	2794	7293	86	2707	7378	84	2622	19.0
11.0	6990	93	3010	7083	93	2917	7176	92	2824	7267	90	2733	7356	88	2644	7443	86	2557	7527	82	2473	18.5
11.5	7106	97	2894	7202	95	2798	7296	93	2704	7388	90	2612	7477	87	2523	7562	82	2438	7642	78	2351	18.0
12.0	7188	98	2812	7285	95	2715	7379	92	2621	7469	88	2531	7554	83	2446	7634	77	2366	7709	71	2291	17.5
12.5	7229	97	2771	7324	93	2676	7414	88	2586	7500	83	2500	7581	77	2419	7655	71	2345	7723	64	2277	17.0
13.0	7226	94	2774	7318	89	2682	7404	83	2596	7485	78	2515	7560	71	2440	7628	65	2372	7689	57	2311	16.5
13.5	7193	90	2807	7280	85	2720	7362	79	2636	7438	73	2562	7508	66	2492	7570	59	2430	7625	51	2375	16.0
14.0	7148	87	2852	7232	81	2768	7311	75	2689	7383	69	2617	7448	62	2552	7506	54	2494	7557	47	2443	15.5
14.5	7118	85	2882	7200	79	2800	7276	73	2724	7346	66	2654	7408	59	2592	7464	52	2536	7512	44	2488	15.0
15.0	7127	84	2873	7208	78	2792	7283	71	2717	7350	64	2650	7411	57	2589	7464	50	2536	7510	42	2490	14.5
15.5	7190	83	2810	7270	77	2730	7343	70	2657	7409	62	2591	7468	55	2532	7519	47	2481	7562	39	2438	14.0
16.0	7312	81	2688	7390	74	2610	7460	67	2540	7523	59	2477	7578	51	2422	7624	43	2376	7663	34	2337	13.5
16.5	7478	77	2522	7551	69	2449	7616	61	2384	7673	53	2327	7721	44	2279	7762	36	2238	7793	27	2207	13.0
17.0	7664	69	2336	7729	61	2271	7785	52	2215	7834	44	2166	7873	35	2127	7904	26	2096	7926	18	2074	12.5
17.5	7839	58	2161	7893	50	2107	7938	41	2062	7975	32	2025	8002	23	1998	8020	14	1980	8030 + 5	1970	12.0	
18.0	7976	45	2024	8017	36	1983	8048	27	1952	8070	18	1930	8084 + 10	1911	1916	8089 + 1	1911	8086 - 8	1914	11.5		
18.5	8059	30	1941	8085	21	1915	8101 + 12	1899	8109 + 4	1891	8109 - 4	1891	8100 - 13	1900	8084	20	1916	11.0				
19.0	8084	15	1916	8094 + 6	1906	8096 - 2	1904	8090 - 10	1910	8077	17	1923	8056	25	1944	8028	32	1972	10.5			
19.5	8060 + 1	1940	8057 - 7	1943	8046	14	1954	8029	21	1971	8004	28	1996	7973	35	2027	7935	41	2065	10.0		
20.0	8007 - 11	1993	7993	17	2007	7972	24	2028	7945	30	2055	7912	36	2088	7872	42	2128	7827	47	2173	9.5	
20.5	7948	21	2052	7925	26	2075	7895	32	2105	7860	38	2140	7820	43	2180	7774	48	2226	7724	52	2276	9.0
21.0	7898	29	2102	7866	34	2134	7830	39	2170	7788	44	2212	7742	48	2258	7691	53	2309	7636	56	2364	8.5
21.5	7862	37	2138	7822	42	2178	7778	46	2222	7730	51	2270	7677	54	2323	7621	57	2379	7562	61	2438	8.0
22.0	7831	46	2169	7783	50	2217	7731	54	2269	7675	58	2325	7615	61	2385	7552	64	2448	7487	66	2513	7.5
22.5	7790	56	2210	7731	60	2269	7670	64	2330	7604	67	2396	7536	70	2464	7465	72	2535	7392	74	2608	7.0
23.0	7715	68	2285	7645	71	2355	7572	74	2428	7496	77	2504	7418	79	2582	7338	81	2662	7257	82	2743	6.5
23.5	7587	80	2413	7505	83	2495	7421	85	2579	7334	87	2666	7246	89	2754	7157	90	2843	7067	90	2933	6.0
24.0	7398	92	2602	7305	94	2695	7210	95	2790	7114	96	2886	7017	97	2983	6920	97	3080	6823	97	3177	5.5
24.5	7152	101	2848	7050	102	2950	6947	103	3053	6844	103	3156	6741	102	3259	6639	102	3361	6538	101	3462	5.0
25.0	6863	106	3137	6756	107	3244	6650	106	3350	6544	105	3456	6439	104	3561	6336	102	3664	6236	100	3764	4.5
25.5	6558	107	3442	6451 + 106	3549	6345	105	3655	6241	103	3759	6140	100	3860	6041	97	3959	5946				

TABLE 16 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

TABLE 16 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	63	v	64	v	65	v	66	v	67	v	68	v	69	v	Arg.							
d															d							
-0.5	5489 - 62	4511	5429 - 58	4571	5374 - 53	4626	5323 - 48	4677	5278 - 43	4722	5237 - 38	4763	5202 - 32	4798	30.5							
0.0	5311	51	4689	5262	47	4738	5218	42	4782	5179	36	4821	5145	31	4855	5117	25	4883	5095	19	4905	30.0
+0.5	5138	41	4862	5099	36	4901	5066	31	4934	5038	25	4962	5016	19	4984	5001 - 12	4999	4992 - 6	5008	4992 - 6	5008	29.5
1.0	4975	31	5025	4947	25	5053	4925	19	5075	4909 - 13	5091	4896	0	5101	4890 - 6	5101	4896	0	5104	4900 + 7	5100	29.0
1.5	4837	20	5163	4820 - 14	5180	4810 - 7	5190	4807 + 1	5193	4811 + 8	5189	4822 + 15	5178	4841	22	5159						28.5
2.0	4742 - 7	5238	4739	0	5261	4743 + 8	5257	4755	16	5245	4774	23	5226	4801	31	5199	4836	39	5164			28.0
2.5	4711 + 9	5289	4724 + 17	5276	4745	25	5255	4773	33	5227	4810	40	5190	4854	49	5146	4907	56	5093			27.5
3.0	4762	26	5238	4792	35	5208	4831	42	5169	4878	51	5122	4932	59	5068	4995	67	5005	5066	75	4934	27.0
3.5	4899	45	5101	4949	54	5051	5006	62	4994	5072	69	4928	5145	77	4855	5226	85	4774	5314	92	4686	26.5
4.0	5120	64	4880	5188	72	4812	5263	79	4737	5346	86	4654	5436	94	4564	5533	100	4467	5637	107	4363	26.0
4.5	5497	81	4593	5491	88	4509	5582	94	4418	5680	101	4320	5783	107	4217	5893	112	4107	6008	118	3992	25.5
5.0	5733	94	4297	5830	100	4170	5933	106	4067	6042	111	3958	6155	116	3845	6273	120	3727	6395	124	3605	25.0
5.5	6068	103	3932	6174	108	3826	6284	112	3716	6399	116	3601	6517	120	3483	6638	123	3362	6762	125	3238	24.5
6.0	6385	108	3615	6495	112	3505	6608	115	3392	6724	118	3276	6843	119	3157	6963	121	3037	7084	122	2916	24.0
6.5	6660	109	3340	6770	111	3230	6883	113	3117	6996	114	3004	7111	115	2889	7226	115	2774	7342	115	2658	23.5
7.0	6886	106	3114	6993	107	3007	7100	108	2900	7209	109	2791	7317	108	2683	7425	107	2575	7532	106	2468	23.0
7.5	7062	101	2938	7164	102	2836	7265	101	2735	7366	101	2634	7467	100	2533	7565	98	2435	7662	95	2338	22.5
8.0	7200	95	2800	7295	95	2705	7390	94	2610	7482	92	2518	7574	90	2426	7663	87	2337	7748	84	2252	22.0
8.5	7317	89	2683	7405	88	2595	7491	86	2509	7576	83	2424	7658	80	2342	7736	76	2264	7810	72	2190	21.5
9.0	7429	82	2571	7510	80	2490	7588	77	2412	7663	73	2337	7735	70	2265	7802	65	2198	7864	60	2136	21.0
9.5	7547	75	2453	7620	72	2380	7690	68	2310	7755	63	2245	7816	58	2184	7871	53	2129	7920	46	2080	20.5
10.0	7675	67	2325	7739	62	2261	7799	57	2201	7853	51	2147	7901	45	2099	7943	38	2057	7978	31	2022	20.0
10.5	7805	57	2195	7859	51	2141	7908	45	2092	7949	38	2051	7984	31	2016	8011	23	1989	8030 + 15	1970	19.5	
11.0	7924	46	2076	7966	39	2034	8002	32	1998	8029	24	1971	8049 + 15	1951	1940	8060 + 7	1940	8063 - 2	1937	19.0		
11.5	8012	34	1988	8042	26	1958	8064	17	1936	8076 + 8	1924	8080	0	1920	8075 - 10	1925	8061	19	1939	18.5		
12.0	8056	21	1944	8072 + 12	1923	8080 + 3	1920	8078 - 6	1922	8067 - 16	1922	8067 - 16	1922	8067 - 16	1922	8067 - 16	1922	8067 - 16	1922	8067 - 16	1922	18.0
12.5	8045 + 9	1955	8049 - 1	1951	8044 - 10	1956	8029	19	1971	8005	29	1995	7972	38	2028	7929	47	2071	7854	58	2196	17.5
13.0	7984 - 2	2016	7977	12	2023	7961	21	2039	7936	30	2064	7901	39	2099	7857	48	2143	7804	58	2196	17.0	
13.5	7885	11	2115	7870	20	2130	7846	29	2154	7813	37	2187	7771	46	2229	7721	55	2279	7661	63	2339	16.5
14.0	7773	16	2227	7752	25	2248	7723	34	2277	7685	42	2315	7640	50	2360	7585	58	2415	7523	66	2477	16.0
14.5	7672	19	2328	7648	28	2352	7616	36	2384	7576	44	2424	7528	52	2472	7473	59	2527	7410	67	2590	15.5
15.0	7604	21	2396	7579	30	2421	7546	37	2454	7505	45	2495	7456	52	2544	7400	59	2600	7338	66	2662	15.0
15.5	7584	23	2416	7557	31	2443	7522	38	2478	7480	46	2520	7431	53	2569	7374	60	2626	7311	67	2689	14.5
16.0	7611	26	2389	7581	34	2419	7544	41	2456	7499	49	2501	7447	55	2553	7388	62	2612	7323	68	2677	14.0
16.5	7672	31	2328	7636	39	2364	7594	46	2406	7544	53	2456	7488	60	2512	7425	66	2575	7357	71	2643	13.5
17.0	7742	39	2258	7700	46	2300	7650	53	2350	7594	59	2406	7532	65	2468	7493	72	2537	7389	77	2611	13.0
17.5	7797	48	2203	7746	54	2254	7688	61	2312	7624	67	2376	7555	72	2445	7480	78	2520	7399	83	2601	12.5
18.0	7813	57	2187	7753	63	2247	7687	69	2313	7615	74	2385	7538	79	2462	7457	84	2543	7371	88	2629	12.0
18.5	7779	66	2221	7711	71	2289	7638	76	2362	7560	80	2440	7477	84	2523	7391	88	2609	7301	91	2699	11.5
19.0	7697	72	2303	7623	76	2377	7545	80	2455	7462	84	2538	7377	87	2623	7288	90	2712	7198	92	2802	11.0
19.5	7580	76	2420	7593	79	2497	7422	82	2578	7338	84	2662	7252	87	2748	7165	88	2835	7076	89	2924	10.5
20.0	7447	77	2553	7399	79	2631	7288	81	2712	7206	83	2794	7123	84	2877	7038	85	2962	6954	85	3046	10.0
20.5	7317	76	2683	7240	77	2760	7162	78	2838	7083	79	2917	7004	80	2996	6924	79	3076	6845	79	3155	9.5
21.0	7203	74	2797	7129	75	2871	7054	75	2946	6978	75	3022	6904	75	3096	6829	74	3171	6756	73	3244	9.0
21.5	7106	72	2894	7033	72	2967	6961	72	3039	6889	72	3111	6817	71	3183	6747	70	3253	6678	68	3322	8.5
22.0	7015	72	2985	6943	72	3057	6872	71	3128	6801	70	3199	6732	69	3268	6664	67	3336	6598	65	3402	8.0
22.5	6912	73	3088	6838	73	3162	6766	72	3234	6696	70	3304	6626	68	3374	6599	66	3441	6494	64	3506	7.5
23.0	6776	76	3224	6700	75	3300	6626	73	3374	6554	71	3446	6484	68	3516	6417	66	3583	6352	63	3648	7.0
23.5	6594	79	3406	6516	77	3484	6440	75	3560	6366	72	3634	6295	69	3705	6228	66	3772	6164	62	3836	6.5
24.0	6363	81	3637	6283	78	3717	6206	75	3794	6133	72	3867	6063	68	3937	5997	64	4003	5935	60	4065	6.0
24.5	6096	80	3904	6017	77	3983	5942	72	4058	5872	68	4128	5806	64	4194	5745	59	4255	5689	54	4311	5.5
25.0	5816	76	4184	5743	71	4257	5674	66	4326	5611	61	4389	5553	55	4447	5500	50	4500	5453	44	4547	5.0
25.5	5555	67	4445	5491	61	4509	5433	56	4567													

TABLE 16 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	77	v	78	v	79	v	80	v	81	v	82	v	83	v	Arg.							
d															d							
-0.5	5144+	18	4856	5166+	25	4834	5193+	30	4807	5227+	36	4773	5266+	42	4734	5311+	48	4689	5362+	53	4638	30.5
0.0	5149	33	4851	5185	39	4815	5227	45	4773	5275	51	4725	5329	56	4671	5388	62	4612	5452	67	4548	30.0
+0.5	5159	48	4841	5210	54	4790	5266	60	4734	5329	66	4671	5398	71	4602	5472	76	4528	5550	81	4450	29.5
1.0	5187	63	4813	5253	70	4747	5326	76	4674	5404	81	4596	5488	86	4512	5577	92	4423	5671	96	4329	29.0
1.5	5256	80	4744	5338	86	4662	5428	92	4572	5522	97	4478	5522	102	4378	5726	107	4274	5835	111	4165	28.5
2.0	5387	96	4613	5486	102	4514	5591	108	4409	5702	113	4298	5817	117	4183	5936	121	4064	6058	124	3942	28.0
2.5	5596	112	4404	5711	117	4289	5831	122	4169	5955	126	4045	6083	130	3917	6215	133	3785	6349	135	3651	27.5
3.0	5886	126	4114	6013	130	3987	6145	133	3855	6280	137	3720	6418	139	3582	6557	140	3443	6698	141	3302	27.0
3.5	6244	135	3756	6380	138	3620	6519	140	3481	6660	142	3340	6802	142	3198	6944	142	3056	7086	141	2914	26.5
4.0	6645	139	3355	6785	140	3215	6925	141	3075	7066	141	2934	7206	140	2794	7345	138	2655	7482	135	2518	26.0
4.5	7056	138	2944	7193	137	2807	7330	136	2670	7465	134	2535	7598	131	2402	7727	128	2273	7853	124	2147	25.5
5.0	7441	131	2559	7571	129	2429	7698	126	2302	7822	122	2178	7942	118	2058	8058	113	1942	8168	108	1832	25.0
5.5	7799	120	2231	7886	116	2114	8001	112	1999	8110	107	1890	8214	101	1786	8312	95	1688	8404	89	1596	24.5
6.0	8020	105	1980	8123	101	1877	8222	95	1778	8314	90	1686	8400	83	1600	8480	76	1520	8552	68	1448	24.0
6.5	8186	90	1814	8274	84	1726	8354	78	1646	8429	71	1571	8496	64	1504	8557	56	1443	8609	48	1391	23.5
7.0	8273	73	1727	8343	67	1657	8406	60	1594	8463	53	1537	8512	45	1488	8553	37	1447	8586	29	1414	23.0
7.5	8292	57	1708	8346	50	1654	8392	42	1608	8430	35	1570	8461	27	1539	8484+	19	1516	8499+	10	1501	22.5
8.0	8265	40	1735	8301	33	1609	8330	25	1670	8351+	17	1649	8364+	9	1636	8369	0	1631	8365-	8	1635	22.0
8.5	8209	23	1791	8228+	15	1772	8239+	7	1761	8242-	1	1758	8237-	10	1763	8223-	18	1777	8201	26	1799	21.5
9.0	8138+	5	1862	8139-	4	1861	8131-	12	1869	8115	20	1885	8091	29	1909	8058	37	1942	8016	46	1984	21.0
9.5	8060-	14	1940	8041	23	1959	8014	32	1986	7978	40	2022	7933	48	2067	7880	57	2120	7819	66	2181	20.5
10.0	7973	35	2027	7934	44	2066	7886	52	2114	7830	61	2170	7765	69	2235	7692	78	2308	7610	86	2390	20.0
10.5	7874	55	2126	7815	64	2185	7747	72	2253	7670	81	2330	7585	89	2415	7492	97	2508	7391	105	2609	19.5
11.0	7756	75	2244	7678	83	2322	7590	91	2410	7495	100	2505	7391	107	2609	7280	115	2720	7162	122	2838	19.0
11.5	7614	92	2386	7519	100	2481	7415	108	2585	7304	115	2696	7185	122	2815	7060	148	2940	6928	134	3072	18.5
12.0	7450	105	2550	7341	112	2659	7225	119	2775	7102	126	2898	6973	132	3027	6838	138	3162	6698	142	3302	18.0
12.5	7269	114	2731	7152	121	2848	7028	127	2972	6899	132	3101	6704	138	3236	6624	142	3376	6480	146	3520	17.5
13.0	7086	118	2914	6905	124	3035	6838	129	3162	6707	134	3293	6571	138	3429	6431	141	3569	6289	144	3711	17.0
13.5	6917	118	3083	6797	123	3203	6671	128	3329	6542	131	3458	6409	134	3591	6273	137	3727	6135	139	3865	16.5
14.0	6779	116	3221	6661	119	3339	6540	123	3460	6415	126	3585	6288	128	3712	6159	130	3841	6028	132	3972	16.0
14.5	6680	111	3320	6568	114	3432	6452	117	3548	6333	120	3667	6213	121	3787	6091	123	3999	5968	123	4032	15.5
15.0	6627	106	3373	6519	109	3481	6409	112	3591	6296	114	3704	6182	115	3818	6066	116	3934	5951	116	4049	15.0
15.5	6613	103	3387	6508	106	3492	6402	108	3598	6294	109	3706	6184	110	3816	6075	110	3925	5955	110	4035	14.5
16.0	6625	102	3375	6523	103	3477	6418	105	3582	6313	106	3687	6208	106	3792	6102	106	3898	5996	105	4004	14.0
16.5	6644	101	3356	6542	102	3458	6439	103	3561	6336	104	3664	6232	104	3768	6129	102	3871	6027	101	3973	13.5
17.0	6654	101	3346	6552	102	3448	6450	102	3550	6348	102	3652	6246	101	3754	6146	99	3854	6047	98	3953	13.0
17.5	6640	101	3360	6539	101	3461	6438	101	3562	6338	100	3662	6240	98	3760	6143	96	3857	6048	93	3952	12.5
18.0	6599	100	3401	6500	99	3500	6402	97	3598	6306	95	3694	6212	93	3788	6120	90	3880	6033	86	3967	12.0
18.5	6533	96	3467	6439	93	3561	6346	91	3654	6207	88	3743	6170	85	3830	6087	81	3913	6007	77	3993	11.5
19.0	6456	89	3544	6368	86	3632	6284	83	3716	6203	79	3797	6126	75	3874	6052	71	3948	5984	66	4016	11.0
19.5	6380	80	3620	6303	76	3697	6228	73	3772	6158	68	3842	6091	64	3909	6029	60	3971	5972	55	4028	10.5
20.0	6319	69	3681	6252	66	3748	6188	62	3812	6128	58	3872	6073	53	3927	6022	48	3978	5976	43	4024	10.0
20.5	6276	60	3724	6219	56	3781	6165	52	3835	6115	47	3885	6071	42	3929	6030	38	3970	5995	33	4025	9.5
21.0	6247	51	3753	6198	47	3802	6152	43	3848	6112	38	3888	6076	34	3924	6044	30	3956	6016	25	3984	9.0
21.5	6216	44	3784	6174	41	3826	6135	36	3865	6101	32	3899	6071	28	3929	6045	24	3955	6024	19	3976	8.5
22.0	6168	40	3832	6130	36	3870	6096	32	3904	6066	28	3934	6041	24	3959	6019	19	3981	6002	15	3998	8.0
22.5	6085	37	3915	6050	33	3950	6020	28	3980	5994	24	4006	5971	20	4029	5953	16	4047	5940	12	4060	7.5
23.0	5959	33	4041	5927	29	4073	5901	25	4099	5878	20	4122	5860	16	4140	5846	12	4154	5836	8	4164	7.0
23.5	5794	29	4206	5767	24	4233	5746	19	4254	5729	15	4271	5716	11	4284	5708	6	4292	5704	2	4296	6.5
24.0	5607	21	4393	5588	16	4412	5574	12	4426	5565	7	4435	5560	3	4440	5560	2	4440	5564	7	4436	6.0
24.5	5426-	12	4574	5417-	6	4583	5413-	1	4587	5414+	4	4586	5420+	8	4580	5431	13	4569	5449	17	4554	5.5
25.0	5281+	1	4719	5285+	6	4715	5293+	11	4707	5307	16	4693	5326	20	4674	5348	25	4652	5375	29	4625	5.0
25.5	5197	15	4803	5215	20	4785	5238	25	4762	5265	29	4735	5297	34	4703	5332						

TABLE 16 (cont.).

Vert. Arg. D.

Hor. Arg. 16.

Arg.	105	v	106	v	107	v	108	v	109	v	110	v	111	v	Arg.							
d															d							
-0.5	6909+	43	3091	6949+	36	3051	6982+	30	3018	7008+	22	2992	7026+	14	2974	7036+	6	2964	7037-	3	2963	30.5
0.0	7165	43	2835	7205	36	2795	7237	28	2763	7261	20	2739	7276	12	2724	7284+	3	2716	7282	6	2718	30.0
+0.5	7444	44	2550	7484	36	2516	7515	27	2485	7538	19	2462	7552	10	2448	7558	0	2442	7553	9	2447	29.5
1.0	7740	43	2260	7779	34	2221	7809	25	2191	7829	16	2171	7840+	6	2160	7842-	4	2158	7833	14	2167	29.0
1.5	8038	39	1962	8073	30	1927	8097	19	1903	8112+	10	1888	8116-	1	1884	8110	11	1890	8094	21	1906	28.5
2.0	8314	30	1686	8338	19	1662	8352+	9	1648	8356-	2	1644	8349	13	1651	8331	23	1669	8302	34	1698	28.0
2.5	8539+	15	1461	8548+	4	1452	8547-	7	1453	8534	18	1466	8510	29	1490	8476	40	1524	8430	51	1570	27.5
3.0	8689-	5	1311	8678-	16	1322	8656	28	1344	8623	39	1377	8579	50	1421	8524	60	1476	8200	100	1800	27.0
3.5	8749	29	1251	8715	40	1285	8670	51	1330	8613	62	1387	8546	72	1454	8470	82	1530	8383	92	1617	26.5
4.0	8716	53	1284	8657	64	1343	8588	74	1412	8509	84	1491	8420	94	1580	8322	102	1678	8216	111	1784	26.0
4.5	8596	77	1404	8515	86	1485	8425	95	1575	8325	104	1675	8217	112	1783	8101	120	1899	7978	127	2022	25.5
5.0	8406	96	1594	8306	104	1694	8197	112	1803	8081	120	1919	7938	126	2042	7828	133	2172	7692	138	2308	25.0
5.5	8160	112	1840	8045	119	1955	7923	125	2077	7794	131	2206	7661	136	2339	7522	141	2478	7379	145	2621	24.5
6.0	7872	123	2128	7746	129	2254	7615	134	2385	7479	138	2521	7339	142	2661	7196	145	2804	7049	148	2951	24.0
6.5	7551	131	2449	7418	135	2582	7281	139	2719	7141	142	2859	6997	145	3003	6852	146	3148	6704	148	3296	23.5
7.0	7198	136	2802	7061	139	2939	6920	142	3080	6778	144	3222	6633	145	3367	6488	146	3512	6342	146	3658	23.0
7.5	6815	140	3185	6674	142	3343	6531	143	3499	6388	144	3612	6243	145	3757	6098	144	3902	5954	144	4046	22.5
8.0	6400	143	3600	6257	144	3743	6112	144	3888	5968	144	4032	5824	143	4176	5681	142	4319	5540	141	4460	22.0
8.5	5958	145	4042	5812	145	4188	5667	144	4333	5523	143	4477	5381	142	4619	5240	139	4760	5102	137	4898	21.5
9.0	5498	147	4502	5352	145	4648	5208	144	4792	5065	141	4935	4925	138	5075	4788	135	5212	4655	131	5345	21.0
9.5	5039	146	4961	4894	143	5106	4752	141	5248	4613	137	5387	4478	133	5522	4347	128	5653	4221	124	5779	20.5
10.0	4603	143	5397	4462	139	5538	4325	135	5675	4192	130	5808	4064	125	5936	3942	119	6058	3826	113	6174	20.0
10.5	4214	137	5786	4079	132	5921	3950	126	6050	3827	120	6173	3710	114	6290	3599	107	6401	3495	100	6505	19.5
11.0	3895	127	6105	3771	121	6229	3654	115	6346	3542	107	6458	3438	100	6562	3342	92	6658	3253	85	6747	19.0
11.5	3664	114	6336	3553	107	6447	3449	100	6551	3353	92	6647	3265	84	6735	3185	76	6815	3112	68	6888	18.5
12.0	3529	99	6471	3434	91	6566	3346	84	6654	3267	76	6723	3195	68	6805	3132	59	6868	3077	51	6923	18.0
12.5	3489	83	6511	3410	75	6590	3339	67	6661	3276	59	6724	3222	51	6778	3175	42	6825	3137	34	6863	17.5
13.0	3536	67	6464	3473	59	6527	3418	51	6582	3371	43	6629	3332	35	6668	3301	27	6699	3277	19	6723	17.0
13.5	3651	52	6349	3603	44	6397	3563	36	6437	3530	28	6470	3506	21	6494	3488	14	6512	3478-	6	6522	16.5
14.0	3816	38	6184	3782	31	6218	3754	24	6246	3734	16	6266	3722-	9	6278	3716-	2	6284	3717+	5	6283	16.0
14.5	4011	27	5989	3988	20	6012	3972	12	6028	3962-	6	6038	3964+	1	6040	3964+	8	6036	3975	14	6025	15.5
15.0	4220	16	5780	4207-	10	5793	4201-	3	5799	4201+	4	5799	4208	10	5792	4221	16	5779	4240	22	5760	15.0
15.5	4433-	7	5567	4429	0	5571	4432+	0	5568	4441	12	5559	4456	18	5544	4478	24	5522	4505	30	5495	14.5
16.0	4644+	3	5356	4650+	9	5350	4662	15	5338	4680	21	5320	4704	27	5296	4734	32	5266	4769	38	5231	14.0
16.5	4853	12	5147	4869	18	5131	4890	24	5110	4918	30	5082	4951	36	5049	4990	41	5010	5033	46	4967	13.5
17.0	5063	23	4937	5089	29	4911	5121	35	4879	5158	40	4842	5200	45	4800	5248	50	4752	5300	54	4700	13.0
17.5	5277	33	4723	5313	39	4687	5355	44	4645	5402	49	4598	5453	54	4547	5509	58	4491	5569	62	4431	12.5
18.0	5496	43	4504	5541	48	4459	5592	53	4408	5647	57	4353	5706	61	4294	5769	64	4231	5835	67	4165	12.0
18.5	5714	51	4286	5767	56	4233	5825	59	4175	5886	63	4114	5950	66	4050	6017	68	3983	6086	70	3914	11.5
19.0	5924	56	4076	5982	60	4018	6044	63	3956	6108	65	3892	6174	67	3826	6242	69	3758	6311	70	3689	11.0
19.5	6114	58	3886	6174	60	3826	6235	62	3765	6298	64	3702	6362	65	3638	6427	65	3573	6492	65	3508	10.5
20.0	6269	56	3731	6326	57	3674	6384	58	3616	6442	59	3558	6501	58	3499	6559	58	3441	6616	57	3384	10.0
20.5	6378	51	3622	6429	51	3571	6480	51	3520	6530	50	3470	6580	49	3420	6628	48	3372	6675	46	3325	9.5
21.0	6431	43	3569	6474	43	3526	6516	42	3484	6557	40	3443	6596	38	3404	6633	36	3367	6668	33	3332	9.0
21.5	6431	35	3569	6495	34	3535	6498	32	3502	6529	30	3471	6557	27	3443	6582	24	3418	6605	21	3395	8.5
22.0	6385	27	3615	6411	25	3589	6435	23	3565	6457	20	3543	6475	17	3525	6490	14	3510	6502+	9	3498	8.0
22.5	6310	21	3690	6330	18	3670	6346	15	3654	6360	12	3640	6371	8	3629	6377+	4	3623	6379	0	3621	7.5
23.0	6227	16	3773	6241	13	3759	6253	10	3747	6260+	6	3740	6264+	2	3736	6263-	3	3737	6258-	8	3742	7.0
23.5	6153	13	3847	6164	9	3836	6171+	5	3829	6174	0	3826	6172-	5	3828	6165	10	3833	6152	15	3848	6.5
24.0	6105	10	3895	6112+	5	3888	6115	0	3885	6112-	6	3888	6104	11	3896	6090	17	3910	6070	23	3930	6.0
24.5	6084+	5	3916	6086	0	3914	6083-	7	3917	6073	13	3927	6057	19	3943	6034	26	3966	6005	33	3995	5.5
25.0	6086-	3	3914	6080-	9	3920	6068	16	3932	6048	23	3952	6021	30	3979	5987	38	4013	5946	45	4054	5.0
25.5	6100	14	3900	6082	21	3918	6057	29	3943	6024	37	3976	5983	45	4017	5934	53	4066	5878	61	4122	4.5
26.0	6																					

TABLE 16 (concl.).

Vert. Arg. D.

Hor. Arg. 16.

Table 16 (concl.) with columns for Arg., 119 v, 120 v, 121 v, 122 v, 123 v, 124 v, 125 v, and Arg. It contains numerical data for various lunar positions.

TABLE 17.

Vert. Arg. D.

Hor. Arg. 17.

Table 17 with columns for Arg., 0 v, 1 v, 2 v, 3 v, 4 v, 5 v, 6 v, 7 v, and Arg. It contains numerical data for various lunar positions.

TABLE 17 (cont.).

Vert. Arg. D.

Hor. Arg. 17.

Arg.	8 v	9 v	10 v	11 v	12 v	13 v	14 v	15 v	Arg.
d									d
-0.5	141-2 159	139-2 161	136-3 164	132-5 168	126-7 174	119-8 181	110-10 190	99-12 201	30.5
0.0	141 4 159	136 5 164	130 7 170	122 9 178	113 11 187	101 12 199	88 13 212	75 14 225	30.0
+0.5	136 7 164	129 9 171	119 11 181	107 12 193	94 14 206	80 15 220	65 15 235	51 14 249	29.5
1.0	128 10 172	117 12 183	104 14 196	90 15 210	74 15 226	59 15 241	45 14 255	32 12 268	29.0
1.5	116 13 184	102 14 198	87 15 213	72 15 228	57 15 243	43 13 257	30 11 270	21 8 279	28.5
2.0	103 15 197	87 16 213	72 15 228	57 14 243	44 12 256	33 10 267	25 6 275	20-3 280	28.0
2.5	89 15 211	74 15 226	59 14 241	46 11 254	38 8 262	31-5 269	28-1 272	29+3 271	27.5
3.0	76 14 224	63 12 237	52 10 248	44 7 256	39-3 261	37 0 263	40+4 260	46 8 254	27.0
3.5	66 11 234	57 8 243	50-5 250	47-2 253	47+2 253	51+5 249	58 9 242	68 11 232	26.5
4.0	62 6 238	57-3 243	55 0 245	57+3 243	62 6 238	70 9 230	80 12 220	93 13 207	26.0
4.5	64-1 236	64+2 236	67+5 233	73 7 227	82 10 218	92 11 208	105 13 195	118 13 182	25.5
5.0	74+3 226	78 6 222	86 8 214	95 10 205	106 11 194	117 12 183	129 12 171	141 11 159	25.0
5.5	92 7 208	100 9 200	109 10 191	120 11 180	130 11 170	141 10 159	151 9 149	159 8 141	24.5
6.0	115 9 185	125 10 175	134 10 166	144 9 156	153 8 147	161 7 139	167 5 133	171+3 129	24.0
6.5	140 9 160	149 9 151	158 8 142	165 6 135	170+4 130	174+3 126	175+1 125	175-1 125	23.5
7.0	163 7 137	170 6 130	174+4 126	177+2 123	178 0 122	177-2 123	175-3 125	170 5 130	23.0
7.5	179+3 121	181+1 119	181 0 119	180-2 120	177-4 123	172 5 128	166 6 134	159 7 141	22.5
8.0	183-1 117	181-3 119	177-5 123	172 6 128	165 7 135	158 7 142	150 7 150	143 7 157	22.0
8.5	176 5 124	170 6 130	163 7 137	155 8 145	147 8 153	140 7 160	133 6 167	128 5 172	21.5
9.0	158 7 142	151 8 149	143 8 157	135 7 165	129 6 171	123-5 177	120-3 180	118-1 182	21.0
9.5	136 7 164	129 7 171	123 5 177	118-4 182	115-2 185	114 0 186	115+2 185	118+4 182	20.5
10.0	115-5 185	111-3 189	109-1 191	109+1 191	111+3 189	116+6 184	123 8 177	132 9 168	20.0
10.5	102 0 198	104+3 196	107+5 193	113 7 187	122 9 178	132 11 168	144 12 156	157 13 143	19.5
11.0	102+6 198	110 9 190	120 11 180	132 13 168	146 14 154	161 15 139	176 15 124	192 15 108	19.0
11.5	116 13 184	130 15 170	146 16 150	163 17 137	180 17 120	198 17 102	214 16 86	229 14 71	18.5
12.0	142 18 158	161 19 139	181 19 119	200 19 100	219 18 81	235 16 65	250 13 50	261 10 39	18.0
12.5	177 21 123	198 21 102	219 20 81	238 18 62	254 15 46	268 12 32	277 8 23	283+4 17	17.5
13.0	214 21 86	235 20 65	253 17 47	268 14 32	280 10 20	288+6 12	292+2 8	291-3 9	17.0
13.5	246 19 54	264 16 36	282 12 22	288 8 12	294+4 20	295-1 5	292-5 8	285 9 15	16.5
14.0	270 14 30	282 10 18	290+6 10	294+2 6	293-3 7	288 7 12	280 10 20	268 13 32	16.0
14.5	282 8 18	288+4 12	290 0 10	288-4 12	282 8 18	272 11 28	260 13 40	246 15 54	15.5
15.0	283+2 17	283-2 17	280-5 20	272 8 28	263 11 37	251 13 49	237 14 63	223 14 77	15.0
15.5	274-3 26	270 6 30	262 9 38	252 11 48	241 12 59	229 12 71	217 12 83	205 11 95	14.5
16.0	259 6 41	251 8 49	242 10 58	232 10 68	221 10 79	211 10 89	202 9 98	194 7 106	14.0
16.5	240 8 60	231 9 69	222 9 78	214 8 86	206 7 94	199 6 101	193 5 107	190-3 110	13.5
17.0	220 8 80	212 7 88	205 6 95	200 5 100	195-4 105	192-2 108	190-1 110	190 0 110	13.0
17.5	201 6 99	196 4 104	192-3 108	190-2 110	189 0 111	190+1 110	191+2 107	193+2 107	12.5
18.0	185-2 115	183-1 117	183 0 117	184+2 116	186+3 114	189 3 111	193 3 107	196 3 104	12.0
18.5	174+1 126	175+2 125	178+3 122	182 4 118	186 4 114	190 4 110	194 3 106	196+1 104	11.5
19.0	168 4 132	172 5 128	177 5 123	182 5 118	187 4 113	191 3 109	193+1 107	193-1 107	11.0
19.5	167 6 133	173 6 127	179 5 121	184 4 116	188 3 112	190+1 110	190-1 110	188 3 112	10.5
20.0	171 7 129	177 6 123	182 4 118	186+3 114	188+1 112	187-2 113	185 4 115	180 6 120	10.0
20.5	178 6 122	183 4 117	186+2 114	187 0 113	186-2 114	182 4 118	177 6 123	170 8 130	9.5
21.0	185+3 115	187+1 113	186-1 114	184-3 116	180 5 120	174 7 126	167 8 133	158 9 142	9.0
21.5	188-1 112	186-3 114	183 5 117	177 6 123	170 8 130	162 8 138	154 9 146	145 9 155	8.5
22.0	185 4 115	180 6 120	173 7 127	165 8 135	156 9 144	147 9 153	139 8 161	131 7 169	8.0
22.5	175 5 125	166 9 134	157 9 143	148 9 152	139 8 161	131 7 169	124 6 176	119 4 181	7.5
23.0	157 10 143	147 10 153	138 9 162	129 8 171	122 7 178	116 5 184	112-3 188	110-1 190	7.0
23.5	136 10 164	126 9 174	118 7 182	112 6 188	107-3 193	105-1 195	104+1 196	106+3 194	6.5
24.0	116 8 184	108 6 192	103-4 197	100-2 200	99 0 201	100+2 200	104 4 196	109 6 191	6.0
24.5	100 5 200	96-3 204	95 0 205	96+2 204	98+4 202	103 6 197	110 7 190	117 7 183	5.5
25.0	93-1 207	93+1 207	95+3 205	100 5 200	106 6 194	112 7 188	120 7 180	127 7 173	5.0
25.5	95+2 205	99 4 201	104 6 196	110 7 190	117 7 183	124 7 176	130 6 170	136 5 164	4.5
26.0	105 5 195	110 6 190	116 6 184	122 6 178	128 5 172	133+4 167	136+3 164	138+1 162	4.0
26.5	118 5 182	122 5 178	127+4 173	131+3 169	134+2 166	134 0 166	134-2 166	131-3 169	3.5
27.0	128+3 172	130+2 170	131 0 169	131-1 169	129-3 171	125-5 175	120 6 180	113 7 187	3.0
27.5	130-1 170	128-2 172	125-4 175	120 6 180	113 8 187	105 9 195	96 9 204	86 9 214	2.5
28.0	122 6 178	116 7 184	108 9 192	98 10 202	88 11 212	77 11 223	66 10 234	57 9 243	2.0
28.5	104 10 196	93 11 207	82 12 218	70 12 230	58 11 242	47 10 253	37 8 263	30-6 270	1.5
29.0	79 13 221	66 13 234	53 13 247	41 11 259	30 10 270	22 7 278	16-4 284	15 0 285	1.0
29.5	52 14 248	39 13 261	27 11 273	18 8 282	11-5 289	8-1 292	9+3 291	14+7 286	+0.5
30.0	30 12 270	19 9 281	11-6 289	6-3 294	5+1 295	9+6 291	17 10 283	29 14 271	0.0
30.5	15-8 285	9-4 291	7 0 293	8+4 292	14+8 286	25+12 275	39+16 261	57+20 243	-0.5
Arg.	v 43	v 42	v 41	v 40	v 39	v 38	v 37	v 36	Arg.

TABLE 17 (cont.).

Vert. Arg. D.

Hor. Arg. 17.

Arg.	16 v	17 v	18 v	19 v	20 v	21 v	22 v	23 v	Arg.
d									d
-0.5	86-13 214	73-13 227	60-13 240	47-12 253	36-11 264	26-8 274	19-6 281	15-2 285	30.5
0.0	61 14 239	47 13 253	34 12 266	23 10 277	14 7 286	9-3 291	8 0 292	10+5 290	30.0
+0.5	37 13 263	25 11 275	15 8 285	8-5 292	5-1 295	6+3 294	11+8 289	21 12 279	29.5
1.0	20 10 280	12 6 288	8-3 292	7+1 293	10+6 290	18 10 282	30 14 270	46 18 254	29.0
1.5	14-5 286	12-1 288	13+4 287	19 8 281	28 12 272	42 16 258	60 19 240	80 22 220	28.5
2.0	19+1 281	22+5 278	30 9 270	41 13 259	56 17 244	74 19 226	95 21 205	117 23 183	28.0
2.5	34 7 266	42 10 258	55 14 245	70 17 230	88 19 212	108 20 192	129 21 171	150 21 150	27.5
3.0	55 11 245	68 14 232	83 16 217	101 18 199	119 19 181	138 19 162	157 18 143	174 17 126	27.0
3.5	81 14 219	96 16 204	112 16 188	129 17 171	145 16 155	161 15 139	176 14 124	188 11 112	26.5
4.0	107 14 193	122 15 178	136 15 164	151 14 149	164 12 136	176 10 124	185 8 115	192 6 108	26.0
4.5	131 13 169	144 12 156	156 11 144	166 10 134	175 8 125	181 5 119	185+3 115	187+1 113	25.5
5.0	152 10 280	161 9 139	169 7 131	175+5 125	178+3 122	180+1 120	179-1 121	177-3 123	25.0
5.5	166 6 134	171+4 129	174+2 126	176 0 124	175-2 125	172-3 128	169 4 131	164 5 136	24.5
6.0	174+1 126	174 0 126	173-2 127	170-3 130	166 4 134	161 5 139	156 5 144	151 5 149	24.0
6.5	173-3 127	170-4 130	165 5 135	160 6 140	154 6 146	149 5 151	144 4 156	140 3 160	23.5
7.0	165 6 135	159 6 141	153 6 147	146 6 154	141 5 159	136 4 164	133-2 167	132-1 168	23.0
7.5	152 7								

TABLE 19.

Vert. Arg. D.

Hor. Arg. 19.

Arg.	0 v	1 v 39	2 v 40	3 v 41	4 v 42	5 v 43	6 v 44	Arg.
-0.5	785 - 51	733 - 52 667	682 - 52 718	630 - 51 770	579 - 51 821	528 - 50 872	480 - 48 920	30.5
0.0	855 49	805 50 595	754 51 646	703 51 697	652 51 748	602 50 798	551 50 849	30.0
+0.5	926 48	878 49 522	828 50 572	778 51 622	727 51 673	676 51 724	625 51 775	29.5
1.0	995 46	948 48 452	900 49 500	850 50 550	800 51 600	748 52 652	696 52 704	29.0
1.5	1058 44	1013 46 387	966 48 434	917 50 483	867 51 533	816 52 584	763 53 637	28.5
2.0	1112 42	1069 44 331	1024 47 376	976 49 424	926 51 474	875 52 525	822 53 578	28.0
2.5	1156 39	1115 42 285	1072 45 328	1026 47 374	977 49 423	927 51 473	875 52 525	27.5
3.0	1190 36	1152 39 248	1112 42 288	1068 45 332	1022 47 378	974 49 426	923 51 477	27.0
3.5	1217 32	1183 36 217	1146 39 254	1105 42 295	1062 44 338	1017 47 383	969 49 431	26.5
4.0	1239 27	1209 31 191	1176 35 224	1140 38 260	1101 41 299	1059 43 341	1015 46 385	26.0
4.5	1259 22	1234 26 166	1207 30 193	1175 33 225	1140 36 260	1102 39 298	1062 42 338	25.5
5.0	1279 17	1260 21 140	1237 24 163	1211 28 189	1181 32 219	1148 35 252	1112 38 288	25.0
5.5	1299 11	1286 15 114	1268 19 132	1247 23 153	1222 27 178	1194 30 206	1162 34 238	24.5
6.0	1318 6	1310 10 90	1298 14 102	1282 18 118	1261 22 139	1237 26 163	1209 30 191	24.0
6.5	1334 - 1	1331 5 69	1324 10 76	1312 14 88	1296 18 104	1276 22 124	1252 26 148	23.5
7.0	1344 + 3	1345 - 1 55	1342 5 58	1335 10 65	1323 14 77	1307 18 93	1286 22 114	23.0
7.5	1344 8	1350 + 3 50	1351 - 1 49	1347 6 53	1339 10 61	1327 14 73	1310 19 90	22.5
8.0	1334 11	1344 7 56	1349 + 3 51	1349 - 2 51	1345 6 55	1337 10 63	1324 15 76	22.0
8.5	1314 15	1327 11 73	1336 7 64	1341 + 2 59	1341 - 2 59	1337 6 63	1320 10 71	21.5
9.0	1284 20	1302 16 98	1315 12 85	1325 7 75	1330 + 3 70	1330 - 1 70	1327 - 6 73	21.0
9.5	1248 24	1270 20 130	1288 16 112	1303 12 97	1313 8 87	1319 + 4 81	1321 0 79	20.5
10.0	1208 29	1235 25 165	1258 22 142	1278 18 122	1294 14 106	1305 10 95	1313 + 5 87	20.0
10.5	1167 34	1199 30 201	1228 27 172	1253 23 147	1275 19 125	1292 15 108	1305 11 95	19.5
11.0	1128 38	1164 35 236	1198 32 202	1228 28 172	1255 25 145	1278 21 122	1297 17 103	19.0
11.5	1089 42	1130 40 270	1168 37 232	1203 33 197	1235 30 165	1263 26 137	1287 22 113	18.5
12.0	1050 46	1094 43 306	1136 41 264	1176 38 224	1212 34 188	1244 30 156	1273 27 127	18.0
12.5	1008 49	1055 46 345	1100 44 300	1143 41 257	1182 38 218	1218 35 182	1251 31 149	17.5
13.0	960 50	1010 49 390	1057 46 343	1102 44 298	1144 41 256	1184 38 216	1220 34 180	17.0
13.5	905 52	950 50 444	1005 48 395	1052 46 348	1097 43 303	1139 40 261	1178 37 222	16.5
14.0	842 52	894 51 506	944 49 456	993 48 407	1039 45 361	1084 43 316	1125 40 275	16.0
14.5	773 52	825 52 575	876 50 524	926 49 474	974 47 426	1021 45 379	1065 43 335	15.5
15.0	700 52	752 52 648	804 51 596	855 51 545	905 49 495	954 48 446	1001 46 399	15.0
15.5	627 52	679 52 721	732 52 668	784 52 616	836 51 564	887 50 513	936 49 464	14.5
16.0	558 52	610 53 790	663 53 737	716 53 684	770 53 630	822 52 578	874 51 526	14.0
16.5	495 52	547 53 853	600 54 800	654 54 746	708 54 692	762 54 638	816 53 584	13.5
17.0	440 50	491 52 909	544 53 856	598 54 802	652 55 748	707 55 693	762 55 638	13.0
17.5	392 49	442 51 958	494 52 906	547 53 853	601 54 799	655 55 745	710 55 690	12.5
18.0	350 46	398 48 1002	447 50 953	498 52 902	550 53 850	604 54 796	658 54 742	12.0
18.5	311 42	355 45 1045	401 47 999	449 49 951	499 51 901	551 52 849	603 53 797	11.5
19.0	272 38	312 41 1088	354 44 1046	399 46 1001	446 48 954	495 49 905	545 50 855	11.0
19.5	233 34	268 36 1132	306 40 1094	347 42 1053	390 44 1010	436 46 964	483 48 917	10.5
20.0	192 29	222 32 1178	256 35 1144	293 38 1107	333 41 1067	375 43 1025	419 45 981	10.0
20.5	152 24	178 28 1222	208 31 1192	240 34 1160	276 38 1124	316 40 1084	357 43 1043	9.5
21.0	116 20	138 24 1262	163 27 1237	192 31 1208	225 34 1175	260 37 1140	299 40 1101	9.0
21.5	86 15	104 20 1296	125 24 1275	151 27 1249	180 31 1220	213 35 1187	249 38 1151	8.5
22.0	66 11	79 16 1321	97 20 1303	119 24 1281	145 28 1255	175 32 1225	208 35 1192	8.0
22.5	56 8	65 12 1335	79 16 1321	98 20 1302	120 24 1280	147 28 1253	177 32 1223	7.5
23.0	56 + 3	62 8 1338	72 12 1328	86 16 1314	104 21 1296	127 25 1273	154 28 1246	7.0
23.5	66 - 1	67 + 3 1333	72 8 1328	82 12 1318	96 16 1304	114 20 1286	136 24 1264	6.5
24.0	82 6	78 - 2 1322	78 + 2 1322	83 7 1317	92 11 1308	104 15 1296	122 19 1278	6.0
24.5	101 11	92 7 1308	86 - 3 1314	86 + 1 1314	89 + 5 1311	96 9 1304	108 14 1292	5.5
25.0	121 17	106 13 1294	95 9 1305	88 - 5 1312	86 0 1314	88 + 4 1312	93 8 1307	5.0
25.5	141 22	120 19 1280	104 15 1296	91 10 1309	83 - 6 1317	79 - 2 1321	79 + 2 1321	4.5
26.0	161 27	135 24 1265	114 20 1286	96 16 1304	82 12 1318	72 7 1328	67 - 3 1333	4.0
26.5	183 32	153 29 1247	126 25 1274	103 21 1297	84 17 1316	70 12 1330	60 8 1340	3.5
27.0	210 36	175 33 1225	144 29 1256	117 25 1283	94 21 1306	75 17 1325	61 12 1339	3.0
27.5	244 39	206 36 1194	172 32 1228	142 29 1258	115 25 1285	92 21 1308	73 16 1327	2.5
28.0	288 42	247 39 1153	210 35 1190	176 32 1224	146 28 1254	120 24 1280	98 20 1302	2.0
28.5	342 44	290 41 1101	259 38 1141	223 35 1177	189 32 1211	159 28 1241	133 24 1267	1.5
29.0	405 46	360 44 1040	318 41 1082	278 38 1122	242 35 1158	208 32 1192	178 28 1222	1.0
29.5	474 48	427 46 973	382 44 1018	340 42 1060	299 39 1101	262 36 1138	227 33 1173	+0.5
30.0	545 49	496 48 904	449 47 951	493 45 997	359 42 1041	318 40 1082	280 37 1120	0.0
30.5	615 - 51	564 - 50 836	514 - 49 886	466 - 48 934	418 - 46 982	373 - 44 1027	330 - 42 1070	-0.5
Arg.	38 v	37 v 75	36 v 74	35 v 73	34 v 72	33 v 71	32 v 70	Arg.

TABLE 19 (cont.).

Vert. Arg. D.

Hor. Arg. 19.

Arg.	7 v 45	8 v 46	9 v 47	10 v 48	11 v 49	12 v 50	13 v 51	Arg.
-0.5	432 - 47 968	386 - 45 1014	343 - 42 1057	301 - 40 1099	263 - 37 1137	227 - 34 1173	195 - 31 1205	30.5
0.0	502 48 898	455 47 945	409 45 991	365 43 1035	323 40 1077	284 38 1116	248 35 1152	30.0
+0.5	575 50 825	525 49 875	477 48 923	430 46 970	385 44 1015	342 42 1058	302 39 1098	29.5
1.0	645 52 755	593 51 807	543 50 857	493 49 907	445 47 955	399 45 1001	354 43 1046	29.0
1.5	710 53 690	658 53 742	605 52 795	553 51 847	502 50 898	453 49 947	405 47 995	28.5
2.0	769 54 631	715 54 685	662 54 738	608 53 792	555 52 845	503 51 897	453 50 947	28.0
2.5	822 53 578	768 54 632	714 54 686	660 54 740	606 54 794	552 53 848	500 52 900	27.5
3.0	872 52 528	819 53 581	765 54 635	711 54 689	656 54 744	602 54 798	549 53 851	27.0
3.5	919 50 481	868 52 532	816 53 584	763 53 637	710 53 690	656 53 744	603 53 797	26.5
4.0	968 48 432	920 49 480	870 51 530	818 51 582	767 52 633	714 52 686	662 52 738	26.0
4.5	1019 44 381	974 46 426	927 48 473	878 49 522	829 50 571	778 51 622	727 51 673	25.5
5.0	1072 40 328	1031 43 369	987 45 413	941 47 459	894 48 506	845 49 555	795 50 605	25.0
5.5	1126 37 274	1088 39 312	1048 42 352	1004 44 399	960 46 440	913 48 487	864 49 536	24.5
6.0	1178 33 222	1143 36 257	1106 39 294	1065 42 335	1022 44 378	977 46 423	930 48 470	24.0
6.5	1224 30 176	1193 33 207	1158 36 242	1120 39 280	1080 42 320	1036 44 364	991 46 499	23.5
7.0	1262 26 138	1234 30 166	1202 33 196	1167 37 233	1129 40 271	1087 43 313	1043 45 357	23.0
7.5	1290 23 110	1265 27 135	1236 31 164	1204 34 193	1168 37 232	1129 40 271	1088 43 312	22.5
8.0	1307 19 93	1286 23 114	1261 27 139	1232 31 168	1200 34 200	1164 38 236	1124 41 276	22.0
8.5	1316 15 84	1299 19 101	1278 23 122	1253 27 147	1225 30 175	1192 34 208	1157 37 243	21.5
9.0	1319 10 81	1307 14 93	1291 18 109	1270 22 130	1246 26 154	1218 30 182	1187 33 213	21.0
9.5	1318 - 5 82	1311 9 89	1300 13 100	1286 17 114	1267 21 133	1244 25 156		

TABLE 19 (concl.).

Vert. Arg. D.

Hor. Arg. 19.

Arg.	14 v	52	15 v	53	16 v	54	17 v	55	18 v	56	19 v	57	Arg.
d													d
-0.5	166-27	1234	141-23	1259	120-19	1280	102-15	1298	89-11	1311	80-7	1320	30.5
0.0	214 32	1186	185 28	1215	158 24	1242	136 21	1264	117 17	1283	102 13	1298	30.0
+0.5	264 36	1136	230 33	1170	198 30	1202	170 26	1230	146 23	1254	125 19	1275	29.5
1.0	312 41	1088	273 38	1127	237 35	1163	204 32	1196	174 28	1226	147 24	1253	29.0
1.5	359 45	1041	316 42	1084	275 39	1125	237 36	1163	202 33	1198	170 30	1230	28.5
2.0	404 48	996	357 46	1043	312 43	1088	270 41	1130	231 37	1169	196 34	1204	28.0
2.5	449 50	951	399 48	1001	352 46	1048	307 44	1093	265 41	1135	226 38	1174	27.5
3.0	497 52	903	446 50	954	397 48	1003	350 46	1050	305 43	1095	263 40	1137	27.0
3.5	550 52	850	499 51	901	449 49	951	400 47	1000	354 45	1046	310 43	1090	26.5
4.0	610 52	790	558 51	842	508 50	892	459 48	941	411 47	989	365 45	1035	26.0
4.5	676 51	724	624 51	776	574 50	826	524 49	876	475 48	925	428 46	972	25.5
5.0	745 51	655	694 51	706	644 50	756	593 50	807	544 49	856	495 48	905	25.0
5.5	815 50	585	764 50	636	714 51	686	663 51	737	612 50	788	562 49	838	24.5
6.0	882 49	518	832 50	568	781 51	619	730 51	670	679 51	721	627 51	773	24.0
6.5	943 48	457	894 50	506	843 51	557	792 52	608	740 52	660	687 52	713	23.5
7.0	997 47	403	949 49	451	899 51	501	847 52	553	795 53	605	742 53	658	23.0
7.5	1043 46	357	996 48	404	947 50	453	897 51	503	845 52	555	792 53	608	22.5
8.0	1082 43	318	1038 46	362	991 48	409	942 50	458	891 51	509	839 52	561	22.0
8.5	1118 40	282	1076 43	324	1032 45	368	986 47	414	937 49	463	887 51	513	21.5
9.0	1152 36	248	1114 39	286	1074 42	326	1030 44	370	985 46	415	938 48	462	21.0
9.5	1187 32	213	1154 35	246	1117 38	283	1078 41	322	1036 43	364	992 45	408	20.5
10.0	1224 27	176	1195 30	205	1163 34	237	1128 37	272	1090 39	310	1049 42	351	20.0
10.5	1261 22	139	1237 26	163	1210 29	190	1179 33	221	1144 36	256	1107 38	293	19.5
11.0	1297 17	103	1278 21	122	1255 25	145	1228 28	172	1198 32	202	1164 35	236	19.0
11.5	1328 12	72	1313 17	87	1295 21	105	1272 25	128	1245 29	155	1215 32	185	18.5
12.0	1351 8	49	1341 12	59	1326 17	74	1308 22	92	1284 25	116	1258 29	142	18.0
12.5	1364 - 4	36	1358 8	42	1347 13	53	1332 17	68	1313 21	87	1290 25	110	17.5
13.0	1364 + 1	36	1362 - 4	38	1356 8	44	1346 13	54	1331 17	69	1311 22	89	17.0
13.5	1354 5	46	1357 + 1	43	1355 - 4	45	1349 8	51	1339 13	61	1324 17	76	16.5
14.0	1334 10	66	1342 6	58	1345 + 1	55	1344 - 3	56	1339 7	61	1330 12	70	16.0
14.5	1308 15	92	1321 11	79	1330 7	70	1336 + 3	65	1336 - 2	64	1332 - 6	68	15.5
15.0	1279 21	121	1298 17	102	1313 13	87	1324 9	76	1330 + 4	70	1332 0	68	15.0
15.5	1249 26	151	1274 23	126	1294 19	106	1311 15	89	1324 10	76	1332 + 6	68	14.5
16.0	1219 32	181	1249 28	151	1276 24	124	1298 20	102	1316 16	84	1330 12	70	14.0
16.5	1189 36	211	1223 33	177	1254 29	146	1282 25	118	1305 21	95	1324 17	76	13.5
17.0	1155 40	245	1194 37	206	1229 33	171	1260 30	140	1288 26	112	1311 22	89	13.0
17.5	1116 43	284	1158 40	242	1196 37	204	1231 33	169	1262 29	138	1290 25	110	12.5
18.0	1070 45	330	1114 42	286	1155 39	245	1192 36	208	1227 32	173	1258 29	142	12.0
18.5	1015 46	385	1061 44	339	1104 42	296	1144 39	256	1181 35	219	1215 32	185	11.5
19.0	953 48	447	1000 46	400	1045 44	355	1087 41	313	1127 38	273	1164 35	236	11.0
19.5	885 49	515	934 48	466	980 46	420	1025 44	375	1067 41	333	1107 38	293	10.5
20.0	816 50	584	865 49	535	913 48	487	961 46	439	1006 44	394	1049 42	351	10.0
20.5	747 51	653	798 51	602	848 50	552	898 49	502	946 47	454	992 45	408	9.5
21.0	683 52	717	735 52	665	787 52	613	838 51	562	888 50	512	938 48	462	9.0
21.5	625 53	775	678 53	722	731 53	669	784 53	616	836 52	564	887 51	513	8.5
22.0	573 53	827	626 53	774	679 54	721	733 54	667	786 53	614	839 52	561	8.0
22.5	525 52	875	578 53	822	631 53	769	684 54	716	738 54	662	792 53	608	7.5
23.0	480 50	920	530 51	870	582 52	818	635 53	765	688 53	712	742 53	658	7.0
23.5	433 48	967	482 49	918	532 50	868	583 51	817	635 52	765	687 52	713	6.5
24.0	385 44	1015	430 46	970	478 48	922	526 49	874	576 50	824	627 51	773	6.0
24.5	333 41	1067	376 43	1024	420 45	980	466 47	934	514 48	886	562 49	838	5.5
25.0	280 37	1120	318 40	1082	359 42	1041	403 44	997	448 46	952	495 48	905	5.0
25.5	226 33	1174	261 36	1139	299 39	1101	340 42	1060	383 44	1017	428 46	972	4.5
26.0	177 30	1223	208 33	1192	243 36	1157	281 39	1119	322 42	1078	365 45	1035	4.0
26.5	135 26	1265	163 30	1237	195 33	1204	230 37	1170	268 40	1132	310 43	1090	3.5
27.0	103 23	1297	128 27	1272	156 30	1245	188 34	1212	224 37	1176	263 40	1137	3.0
27.5	82 19	1318	103 23	1297	128 27	1272	157 31	1243	190 34	1210	226 38	1174	2.5
28.0	73 14	1327	89 19	1311	110 23	1290	135 27	1265	163 30	1237	196 34	1204	2.0
28.5	71 10	1329	83 14	1317	99 18	1301	119 22	1281	143 26	1257	170 30	1230	1.5
29.0	76 + 4	1324	82 8	1318	92 12	1308	106 17	1294	125 20	1275	147 24	1253	1.0
29.5	83 - 2	1317	83 + 2	1317	87 + 6	1313	96 11	1304	108 15	1292	125 19	1275	+0.5
30.0	90 8	1310	84 - 4	1316	82 0	1318	85 + 4	1315	91 9	1309	102 13	1298	0.0
30.5	98 - 14	1302	86 - 10	1314	78 - 6	1322	75 - 2	1325	75 + 3	1325	80 + 7	1320	-0.5
Arg.	24 v	62	23 v	61	22 v	60	21 v	59	20 v	58	19 v	57	Arg.

TABLE 20.

Vert. Arg. D.

Hor. Arg. 20.

Arg.	0 v	1 v	48	2 v	49	3 v	50	4 v	51	5 v	52	6 v	53	7 v	54	Arg.
d																d
-0.5	58+1	59+1	141	61+2	139	62+2	138	64+2	136	66+2	134	68+2	132	70+2	130	30.5
0.0	63 1	65 2	135	66 2	134	68 2	132	70 2	130	72 2	128	75 2	125	77 2	123	30.0
+0.5	66 2	68 2	132	70 2	130	72 2	128	74 2	126	76 2	124	79 2	121	81 2	119	29.5
1.0	68 2	70 2	130	73 2	127	75 2	125	78 2	122	81 2	119	83 2	117	86 2	114	29.0
1.5	72 3	75 3	125	78 3	122	81 3	119	84 3	116	88 3	112	91 3	109	94 3	106	28.5
2.0	81 4	85 4	115	89 4	111	92 4	108	96 4	104	100 4	100	104 4	96	107 4	93	28.0
2.5	97 4	101 4	99	105 4	95	109 4	91	113 4	87	117 4	83	121 4	79	125 4	75	27.5
3.0	116 4	120 4	80	124 4	76	128 4	72	132 4	68	136 4	64	140 4	60	143 4	57	27.0
3.5	136 4	140 4	60	144 4	56	147 3	53	150 3	50	153 3	47	156 3	44	158 2	42	26.5
4.0	154 3	156 3	44	159 2</												

TABLE 23 (cont.). Cols. 30-57, 407-434.

Arg. 23.

Table with columns Arg., 30, 31, 32, 33, 34, 35, 36, v, 37, 38, 39, 40, 41, 42, 43, Succ. and rows for Arg. values from 0.0 to 15.0.

Table with columns Arg., 44, 45, 46, 47, 48, 49, 50, v, 51, 52, 53, 54, 55, 56, 57, Succ. and rows for Arg. values from 0.0 to 15.0.

TABLE 23 (cont.). Cols. 58-87, 377-406.

Arg. 23.

Table with columns Arg., 58, 59, 60, 61, 62, 63, 64, 65, v, 66, 67, 68, 69, 70, 71, 72, Succ. and rows for Arg. values from 0.0 to 15.0.

Table with columns Arg., 73, 74, 75, 76, 77, 78, 79, 80, v, 81, 82, 83, 84, 85, 86, 87, Succ. and rows for Arg. values from 0.0 to 15.0.

TABLE 23 (cont.). Cols. 88-115, 349-376.

Arg. 23.

Table with columns Arg., 88, 89, 90, 91, 92, 93, 94, v, 95, 96, 97, 98, 99, 100, 101, Succ., and Arg. at the bottom. It contains numerical data for various lunar parameters.

Table with columns Arg., 102, 103, 104, 105, 106, 107, 108, v, 109, 110, 111, 112, 113, 114, 115, Succ., and Arg. at the bottom. It contains numerical data for various lunar parameters.

TABLE 23 (cont.). Cols. 116-145, 319-348.

Arg. 23.

Table with columns Arg., 116, 117, 118, 119, 120, 121, 122, 123, v, 124, 125, 126, 127, 128, 129, 130, Succ., and Arg. at the bottom. It contains numerical data for various lunar parameters.

Table with columns Arg., 131, 132, 133, 134, 135, 136, 137, 138, v, 139, 140, 141, 142, 143, 144, 145, Succ., and Arg. at the bottom. It contains numerical data for various lunar parameters.

TABLE 23 (cont.). Cols. 146-173, 291-318.

Arg. 23.

TABLE 23 (cont.). Cols. 174-203, 261-290.

Arg. 23.

Table with columns Arg., 146, 147, 148, 149, 150, 151, 152, v, 153, 154, 155, 156, 157, 158, 159, Succ., and Arg. rows 0.0 to 15.0.

Table with columns Arg., 174, 175, 176, 177, 178, 179, 180, 181, v, 182, 183, 184, 185, 186, 187, 188, Succ., and Arg. rows 0.0 to 15.0.

Table with columns Arg., 160, 161, 162, 163, 164, 165, 166, v, 167, 168, 169, 170, 171, 172, 173, Succ., and Arg. rows 0.0 to 15.0.

Table with columns Arg., 189, 190, 191, 192, 193, 194, 195, 196, v, 197, 198, 199, 200, 201, 202, 203, Succ., and Arg. rows 0.0 to 15.0.

TABLE 23 (cont.). Cols. 204-260.

Arg. 23.

TABLE 23 (cont.). Cols. 465-492, 571-598.

Arg. 23.

Table with columns Arg., 204, 205, 206, 207, 208, 209, 210, 211, v, 212, 213, 214, 215, 216, 217, 218, Succ., d, and Arg. at the bottom.

Table with columns Arg., 465, 466, 467, 468, 469, 470, 471, v, 472, 473, 474, 475, 476, 477, 478, Succ., d, and Arg. at the bottom.

Table with columns Arg., 219, 220, 221, 222, 223, 224, 225, v, 226, 227, 228, 229, 230, 231, 232, Succ., d, and Arg. at the bottom.

Table with columns Arg., 479, 480, 481, 482, 483, 484, 485, v, 486, 487, 488, 489, 490, 491, 492, Succ., d, and Arg. at the bottom.

TABLE 23 (cont.). Cols. 493-518, 545-570.

Arg. 23.

Table with columns for Arg. (493-518, 545-570) and rows for d (0.0-14.5) and Succ. (29-41). Values include lunar coordinates and distances.

Table with columns for Arg. (506-518) and rows for d (0.0-14.5) and Succ. (42-54). Values include lunar coordinates and distances.

TABLE 23 (concl.). Cols. 519-544.

Arg. 23.

Table with columns for Arg. (519-544) and rows for d (0.0-14.5) and Succ. (55-67). Values include lunar coordinates and distances.

TABLE 24. Cols. 0-15, 49-64.

Arg. 24.

Table with columns for Arg. (0-15, 49-64) and rows for d (0.0-14.5) and Succ. (103-118). Values include lunar coordinates and distances.

TABLE 24 (cont.). Cols. 16-48, 65-81, 150-166.

Arg. 24.

TABLE 24 (concl.). Cols. 82-149.

Arg. 24.

Table with columns Arg., 16-24, v, 25-32, Succ., d. Rows 0.0 to 14.0 and Succ. values.

Table with columns Arg., 82-90, v, 91-98, Succ., d. Rows 0.0 to 13.5 and Succ. values.

Table with columns Arg., 65-73, v, 74-81, Succ., d. Rows 0.0 to 13.5 and Succ. values.

Table with columns Arg., 99-107, v, 108-115, Succ., d. Rows 0.0 to 13.5 and Succ. values.

TABLE 25. Cols. 0—11, 35—46.

Arg. 25.

TABLE 25 (cont.). Cols. 12—34.

Arg. 25.

Arg.	0	1	2	3	4	5	v	6	7	8	9	10	11	Succ.
	0	188	187	186	185	184		183	182	181	180	179	178	Succ.
d														d
0.0	[21967]	21967	21967	21967	21967	21967	0	21967	21967	21967	21967	21967	21967	25.5
0.5	21885	21884	21883	21882	21882	21881	-1	21880	21879	21878	21877	21876	21875	25.0
1.0	21639	21637	21636	21634	21632	21630	2	21629	21627	21625	21624	21622	21620	24.5
1.5	21234	21231	21229	21226	21223	21221	3	21218	21216	21213	21210	21208	21205	24.0
2.0	20674	20671	20668	20664	20661	20658	3	20654	20651	20648	20644	20641	20637	23.5
2.5	19970	19966	19962	19958	19954	19949	4	19945	19941	19937	19933	19929	19925	23.0
3.0	19131	19126	19121	19116	19112	19107	5	19102	19097	19092	19088	19083	19078	22.5
3.5	18170	18164	18159	18153	18148	18142	5	18137	18132	18126	18121	18116	18110	22.0
4.0	17101	17095	17089	17083	17077	17071	6	17065	17059	17053	17047	17041	17036	21.5
4.5	15940	15934	15927	15921	15915	15908	6	15902	15896	15889	15883	15876	15870	21.0
5.0	14706	14699	14692	14686	14679	14672	7	14665	14659	14652	14645	14639	14632	20.5
5.5	13415	13408	13401	13394	13387	13380	7	13374	13367	13360	13353	13346	13339	20.0
6.0	12089	12082	12074	12067	12060	12053	7	12046	12039	12032	12025	12018	12011	19.5
6.5	10746	10738	10731	10724	10717	10710	7	10703	10696	10689	10682	10674	10667	19.0
7.0	9407	9400	9392	9385	9378	9371	7	9364	9357	9350	9343	9336	9329	18.5
7.5	8091	8084	8078	8071	8064	8057	7	8050	8043	8036	8030	8023	8016	18.0
8.0	6820	6813	6807	6800	6794	6787	7	6780	6774	6767	6761	6754	6748	17.5
8.5	5611	5605	5599	5592	5586	5580	6	5574	5568	5562	5555	5549	5543	17.0
9.0	4483	4478	4472	4466	4460	4455	6	4449	4443	4438	4432	4426	4420	16.5
9.5	3453	3448	3443	3438	3433	3428	5	3422	3417	3412	3407	3402	3397	16.0
10.0	2537	2532	2528	2523	2518	2514	5	2510	2505	2500	2496	2492	2487	15.5
10.5	1747	1743	1740	1736	1732	1728	4	1724	1721	1717	1713	1709	1705	15.0
11.0	1096	1093	1090	1087	1084	1081	3	1078	1075	1072	1069	1066	1063	14.5
11.5	594	592	590	588	585	583	2	581	579	577	574	572	570	14.0
12.0	249	247	246	245	243	242	1	240	239	238	236	235	234	13.5
12.5	65	64	64	63	62	62	-1	61	61	60	60	59	59	13.0
13.0	44	45	45	46	46	46	0	47	47	47	48	48	48	12.5
13.5	189	190	191	192	194	195	+1	197	197	199	200	201	202	12.0
14.0	496	498	500	502	504	506	2	508	510	512	514	516	519	11.5
14.5	960	963	966	969	972	975	3	978	980	983	986	989	992	11.0
15.0	1575	1579	1583	1586	1590	1594	4	1597	1601	1605	1608	1612	1616	10.5
15.5	2332	2337	2341	2346	2350	2354	4	2359	2363	2367	2372	2376	2380	10.0
16.0	3219	3224	3229	3234	3239	3244	5	3249	3254	3260	3265	3270	3275	9.5
16.5	4223	4228	4234	4240	4245	4251	6	4256	4262	4268	4273	4279	4285	9.0
17.0	5328	5335	5341	5347	5353	5359	6	5365	5371	5377	5383	5390	5396	8.5
17.5	6519	6526	6532	6539	6545	6552	7	6558	6565	6571	6578	6584	6591	8.0
18.0	7777	7784	7791	7798	7804	7811	7	7818	7825	7832	7838	7845	7852	7.5
18.5	9083	9090	9097	9104	9111	9118	7	9125	9132	9140	9147	9154	9161	7.0
19.0	10419	10426	10433	10440	10447	10454	7	10461	10468	10475	10482	10490	10497	6.5
19.5	11762	11770	11777	11784	11791	11798	7	11805	11812	11819	11826	11833	11840	6.0
20.0	13095	13102	13109	13116	13123	13130	7	13137	13144	13151	13158	13165	13172	5.5
20.5	14396	14403	14410	14416	14423	14430	7	14436	14443	14450	14457	14464	14470	5.0
21.0	15646	15652	15659	15665	15672	15678	6	15684	15691	15697	15704	15710	15717	4.5
21.5	16826	16832	16838	16844	16850	16856	6	16862	16868	16874	16880	16886	16892	4.0
22.0	17919	17924	17930	17935	17941	17946	5	17952	17957	17963	17968	17974	17979	3.5
22.5	18908	18913	18918	18922	18927	18932	5	18937	18942	18947	18952	18957	18962	3.0
23.0	19778	19782	19786	19790	19795	19799	4	19803	19808	19812	19816	19820	19824	2.5
23.5	20516	20520	20523	20526	20530	20534	4	20537	20541	20544	20548	20551	20555	2.0
24.0	21111	21114	21117	21120	21122	21125	3	21128	21130	21133	21136	21139	21141	1.5
24.5	21555	21557	21559	21561	21563	21565	2	21566	21568	21570	21572	21574	21576	1.0
25.0	21840	21841	21842	21843	21844	21846	+1	21847	21848	21849	21850	21851	21852	0.5
25.5	21962	21963	21963	21963	21963	21963	0	21964	21964	21964	21964	21964	21964	0.0
Succ.	143	144	145	146	147	148		149	150	151	152	153	154	
	46	45	44	43	42	41	v	40	39	38	37	36	35	Arg.

Arg.	12	13	14	15	16	17	v	18	19	20	21	22	23	Succ.
	177	176	175	174	173	172		171	170	169	168	167	166	Succ.
d														d
0.0	21967	21967	21967	21967	21967	21967	0	21967	21966	21966	21966	21966	21966	25.5
0.5	21874	21873	21872	21871	21870	21870	-1	21869	21868	21867	21866	21865	21864	25.0
1.0	21618	21616	21615	21613	21611	21609	2	21607	21606	21604	21602	21600	21598	24.5
1.5	21203	21200	21197	21195	21192	21190	3	21187	21184	21182	21179	21176	21174	24.0
2.0	20634	20630	20627	20624	20620	20617	3	20613	20610	20607	20603	20600	20596	23.5
2.5	19920	19916	19912	19908	19904	19900	4	19896	19892	19887	19883	19879	19875	23.0
3.0	19073	19068	19064	19059	19054	19049	5	19044	19040	19035	19030	19025	19020	22.5
3.5	18105	18099	18094	18088	18083	18078	5	18072	18067	18061	18056	18050	18045	22.0
4.0	17030	17024	17018	17012	17006	17000	6	16994	16988	16982	16976	16970	16964	21.5
4.5	15864	15857	15851	15845	15838	15832	6	15826	15819	15813	15806	15800	15794	21.0
5.0	14625	14618	14612	14605	14598	14592	7	14585	14578	14571	14565	14558	14551	20.5
5.5	13332	13325	13318	13311	13304	13297	7	13290	13283	13276	13269	13262	13255	20.0
6.0	12004	11996	11989	11982	11975	11968	7	11961	11954	11947	11940	11933	11926	19.5
6.5	10660	10653	10646	10639	10632	10625	7	10618	10610	10603	10596	10589	10582	19.0
7.0	9322	9315	9308	9301	9294	9287	7	9280	9273	9266	9259	9252	9245	18.5
7.5	8009	8002	7995	7988	7982	7975	7	7968	7961	7954	7948	7941	7934	18.0
8.0	6741	6734	6728	6721	6715	6708	7	6702	6695	6689	6682	6676	6669	17.5
8.5	5537	5531	5525	5518	5512	5506	6	5500	5494	5488	5482	5475	5469	17.0
9.0	4415	4409	4403	4398	4392	4386	6	4381	4375	4369	4364	4358	4352	16.5
9.5	3392	3386	3381	3376	3371	3366	5	3361	3356	3351	3346	3341	3336	16.0
10.0	2482	2478	2474	2469	2465	2460	4	2456	2451	2447	2442	2438	2434	15.5
10.5	1702	1698	1694	1690	1687	1683	4	1679	1675	1672	1668	1664	1660	15.0
11.0	1060	1057	1054	1051	1048	1045	3	1042	1039	1036	1033	1030	1027	14.5
11.5	568	566	564	561	559	557	2	555	553	550	548	546	544	14.0
12.0	232	231	230	228	227	226	-1	224	223	222	220	219	218	13.5
12.5	58	58	57	57	56	56	0	56	55	55	54	54	53	13.0
13.0	49	49	50	50	50	51	0	51	52	52	52	53	53	12.5
13.5	204	205	206	207	209	210	+1	211	212					

TABLE 25 (cont.). Cols. 47-60, 175-188.

Arg. 25.

Table with columns for Arg. (47-60), values, and Succ. (1-14). Includes a 'd' column at the bottom.

TABLE 25 (cont.). Cols. 61-75, 160-174.

Arg. 25.

Table with columns for Arg. (61-75), values, and Succ. (15-29). Includes a 'd' column at the bottom.

TABLE 25 (cont.). Cols. 76-89, 146-159.

Arg. 25.

Arg.	76	77	78	79	80	81	82	v	83	84	85	86	87	88	89	Succ.
	113	112	111	110	109	108	107		106	105	104	103	102	101	100	
d																d
0.0	21954	21954	21953	21953	21952	21952	21952	0	21951	21951	21951	21950	21950	21949	21949	25.0
0.5	21806	21804	21803	21802	21801	21799	21798	-1	21797	21796	21795	21793	21792	21791	21789	24.5
1.0	21495	21493	21491	21489	21487	21485	21482	2	21480	21478	21476	21474	21472	21470	21468	24.0
1.5	21027	21024	21021	21018	21015	21012	21009	3	21006	21004	21001	20998	20995	20992	20989	23.5
2.0	20408	20404	20401	20397	20394	20390	20386	4	20382	20379	20375	20371	20368	20364	20360	23.0
2.5	19648	19644	19639	19635	19631	19626	19622	4	19617	19613	19609	19604	19600	19595	19591	22.5
3.0	18758	18753	18748	18743	18738	18733	18728	5	18723	18718	18713	18708	18703	18698	18692	22.0
3.5	17752	17746	17741	17735	17729	17724	17718	6	17712	17707	17701	17696	17690	17684	17679	21.5
4.0	16644	16638	16632	16626	16620	16614	16608	6	16601	16595	16589	16583	16577	16571	16565	21.0
4.5	15452	15445	15439	15432	15426	15419	15413	7	15406	15400	15393	15387	15380	15374	15367	20.5
5.0	14192	14186	14179	14172	14165	14158	14152	7	14145	14138	14131	14124	14117	14111	14104	20.0
5.5	12885	12878	12871	12864	12857	12850	12843	7	12836	12829	12822	12815	12808	12801	12794	19.5
6.0	11549	11542	11535	11528	11521	11514	11507	7	11500	11493	11485	11478	11471	11464	11457	19.0
6.5	10206	10198	10191	10184	10177	10170	10163	7	10156	10149	10142	10135	10128	10121	10113	18.5
7.0	8874	8867	8860	8853	8846	8839	8832	7	8825	8818	8811	8804	8797	8790	8783	18.0
7.5	7574	7567	7560	7554	7547	7540	7533	7	7526	7520	7513	7506	7500	7493	7486	17.5
8.0	6325	6319	6312	6306	6299	6293	6287	6	6280	6274	6267	6261	6254	6248	6242	17.0
8.5	5147	5141	5135	5129	5123	5117	5111	6	5105	5099	5093	5087	5081	5075	5069	16.5
9.0	4056	4051	4045	4040	4034	4029	4024	5	4018	4012	4007	4002	3996	3991	3985	16.0
9.5	3070	3065	3060	3056	3051	3046	3041	5	3036	3031	3026	3021	3016	3012	3007	15.5
10.0	2203	2199	2195	2191	2186	2182	2178	4	2174	2170	2165	2161	2157	2153	2148	15.0
10.5	1468	1464	1461	1457	1454	1450	1447	3	1443	1440	1436	1433	1430	1426	1423	14.5
11.0	876	873	871	868	865	862	860	3	857	854	852	849	846	844	841	14.0
11.5	436	434	433	431	429	427	425	2	423	421	419	417	416	414	412	13.5
12.0	155	154	153	152	151	150	149	-1	148	147	146	145	144	143	142	13.0
12.5	37	36	36	36	36	36	36	0	36	35	35	35	35	35	35	12.5
13.0	83	84	84	85	86	86	87	+1	88	88	89	90	91	92	92	12.0
13.5	293	295	296	298	299	301	302	2	304	306	307	309	310	312	314	11.5
14.0	664	666	669	671	673	676	678	2	681	683	685	688	690	693	695	11.0
14.5	1190	1193	1196	1200	1203	1206	1209	3	1212	1216	1219	1222	1225	1228	1232	10.5
15.0	1863	1867	1871	1875	1879	1883	1887	4	1891	1895	1903	1907	1911	1915	1919	10.0
15.5	2674	2678	2683	2688	2692	2697	2702	5	2706	2711	2716	2720	2725	2730	2734	9.5
16.0	3610	3615	3620	3625	3631	3636	3641	5	3646	3652	3657	3662	3668	3673	3678	9.0
16.5	4656	4662	4668	4674	4679	4685	4691	6	4697	4703	4708	4714	4720	4726	4732	8.5
17.0	5798	5804	5810	5817	5823	5829	5836	6	5842	5848	5854	5861	5867	5873	5880	8.0
17.5	7018	7025	7031	7038	7044	7051	7058	7	7064	7071	7078	7084	7091	7098	7104	7.5
18.0	8298	8305	8312	8318	8325	8332	8339	7	8346	8353	8360	8367	8374	8380	8387	7.0
18.5	9618	9625	9632	9639	9646	9653	9660	7	9667	9674	9682	9689	9696	9703	9710	6.5
19.0	10959	10966	10973	10980	10987	10995	11002	7	11009	11016	11023	11030	11037	11044	11052	6.0
19.5	12301	12308	12315	12322	12329	12336	12343	7	12350	12357	12364	12371	12378	12386	12392	5.5
20.0	13623	13630	13637	13644	13651	13658	13664	7	13671	13678	13685	13692	13699	13706	13713	5.0
20.5	14906	14912	14919	14926	14932	14939	14946	7	14952	14959	14966	14972	14979	14985	14992	4.5
21.0	16130	16136	16142	16149	16155	16161	16167	6	16174	16180	16186	16192	16199	16205	16211	4.0
21.5	17277	17283	17288	17294	17300	17306	17312	6	17318	17323	17329	17335	17341	17347	17352	3.5
22.0	18330	18335	18340	18346	18351	18356	18361	5	18367	18372	18377	18382	18388	18393	18398	3.0
22.5	19272	19277	19282	19286	19291	19296	19300	5	19305	19310	19314	19319	19324	19328	19333	2.5
23.0	20091	20095	20099	20103	20107	20111	20115	4	20119	20123	20127	20131	20135	20139	20142	2.0
23.5	20773	20776	20780	20783	20786	20789	20792	3	20796	20799	20802	20805	20808	20812	20815	1.5
24.0	21308	21311	21313	21316	21318	21321	21323	2	21325	21328	21330	21333	21335	21337	21340	1.0
24.5	21689	21691	21692	21694	21696	21697	21699	2	21700	21702	21703	21705	21706	21708	21709	0.5
25.0	21909	21910	21910	21911	21912	21913	21913	+1	21914	21915	21915	21916	21917	21918	21918	0.0
Succ.	30	31	32	33	34	35	36		37	38	39	40	41	42	43	
	159	158	157	156	155	154	153	v	152	151	150	149	148	147	146	Arg.

TABLE 25 (cont.). Cols. 90-103, 132-145.

Arg. 25.

Arg.	90	91	92	93	94	95	96	v	97	98	99	100	101	102	103	Succ.
	99	98	97	96	95	94	93		92	91	90	89	88	87	86	
d																d
0.0	21949	21948	21948	21947	21947	21946	21946	0	21946	21945	21945	21944	21944	21943	21943	25.0
0.5	21788	21787	21786	21784	21783	21782	21780	-1	21779	21778	21776	21775	21774	21772	21771	24.5
1.0	21466	21464	21461	21459	21457	21455	21453	2	21451	21448	21446	21444	21442	21440	21438	24.0
1.5	20986	20983	20980	20977	20974	20971	20968	3	20965	20962	20959	20956	20953	20950	20947	23.5
2.0	20357	20353	20349	20346	20342	20338	20334	4	20330	20327	20323	20319	20316	20312	20308	23.0
2.5	19586	19582	19578	19573	19569	19564	19560	4	19555	19551	19546	19542	19538	19533	19529	22.5
3.0	18687	18682	18677	18672	18667	18662	18657	5	18652	18647	18642	18636	18631	18626	18621	22.0
3.5	17673	17667	17662	17656	17650	17645	17639	6	17633	17628	17622	17616	17611	17605	17599	21.5
4.0	16558	16552	16546	16540	16534	16528	16522	6	16516	16509	16503	16497	16491	16485	16479	21.0
4.5	15360	15354	15347	15341	15334	15328	15321	7	15315	15308	15302	15295	15288	15282	15275	20.5
5.0	14097	14090	14083	14076	14070	14063	14056	7	14049	14042	14036	14029	14022	14015	14008	20.0
5.5	12787	12780	12773	12766	12759	12752	12745	7	12738	12731	12724	12717	12710	12703	12696	19.5
6.0	11450	11443	11436	11429	11422	11414	11407	7	11400	11393	11386	11379	11372	11364	11357	19.0
6.5	10106	10099	10092	10085	10078	10071	10064	7	10057	10050	10042	10035	10028	10021	10014	18.5
7.0	8776	8769	8762	8755	8748	8741	8734	7	8727	8720	8713	8706	8700	8693	8686	18.0
7.5	7479	7472	7466	7459	7452	7446	7439	7	7432	7425	7419	7412	7405	7399	7392	17.5
8.0	6235	6229	6222	6216	6210	6203	6197	6	6190	6184	6178	6171	6165	6158	6152	17.0
8.5	5063	5057	5051	50												

TABLE 25 (concl.). Cols. 104-131.

Arg. 25.

Table with columns Arg., 104, 105, 106, 107, 108, 109, 110, v, 111, 112, 113, 114, 115, 116, 117, Succ., and Arg. at the bottom. It contains numerical data for lunar longitude entries.

TABLE 26. Cols. 0-13, 72-85.

Arg. 26.

Table with columns Arg., 0, 1, 2, 3, 4, 5, 6, v, 7, 8, 9, 10, 11, 12, 13, Succ., and Arg. at the bottom. It contains numerical data for lunar longitude entries.

TABLE 26 (cont.). Cols. 14-27, 58-71.

Arg. 26.

Table with columns Arg., 14, 15, 16, 17, 18, 19, 20, v, 21, 22, 23, 24, 25, 26, 27, and Succ. It contains numerical data for lunar longitude and distance.

TABLE 26 (cont.). Cols. 28-57.

Arg. 26.

Table with columns Arg., 28, 29, 30, 31, 32, 33, 34, 35, v, 36, 37, 38, 39, 40, 41, 42, and Succ. It contains numerical data for lunar longitude and distance.

TABLE 26 (cont.). Cols. 86-99, 128-141.

Arg. 26.

TABLE 26 (concl.). Cols. 100-127.

Arg. 26.

Arg.	86	87	88	89	90	91	92	v	93	94	95	96	97	98	99	Succ.
	55	54	53	52	51	50	49		48	47	46	45	44	43	42	
d																d
0.0	29738	29738	29737	29736	29735	29735	29734	-1	29733	29732	29732	29731	29730	29729	29728	29.0
0.5	29557	29555	29553	29551	29549	29548	29546	2	29544	29542	29540	29538	29536	29534	29532	28.5
1.0	29214	29211	29208	29205	29202	29199	29196	3	29193	29190	29186	29183	29180	29177	29174	28.0
1.5	28713	28709	28704	28700	28696	28692	28688	4	28684	28680	28676	28672	28668	28663	28659	27.5
2.0	28060	28054	28049	28044	28039	28034	28029	5	28024	28018	28013	28008	28003	27998	27992	27.0
2.5	27261	27255	27249	27243	27237	27231	27225	6	27219	27212	27206	27200	27194	27188	27181	26.5
3.0	26327	26320	26313	26306	26299	26292	26285	7	26278	26271	26264	26256	26249	26242	26235	26.0
3.5	25267	25259	25251	25243	25236	25228	25220	8	25212	25204	25196	25188	25180	25172	25164	25.5
4.0	24093	24084	24076	24067	24058	24050	24041	9	24032	24024	24015	24006	23998	23989	23980	25.0
4.5	22818	22809	22800	22790	22781	22772	22762	9	22753	22744	22734	22725	22716	22706	22697	24.5
5.0	21457	21447	21437	21427	21417	21407	21397	10	21388	21378	21368	21358	21348	21338	21328	24.0
5.5	20023	20013	20003	19992	19982	19972	19961	10	19951	19941	19930	19920	19910	19899	19889	23.5
6.0	18534	18524	18513	18502	18492	18481	18470	11	18460	18449	18438	18428	18417	18406	18396	23.0
6.5	17006	16995	16984	16973	16962	16951	16940	11	16930	16919	16908	16897	16886	16875	16864	22.5
7.0	15455	15444	15433	15422	15411	15400	15389	11	15378	15367	15356	15345	15334	15323	15312	22.0
7.5	13899	13888	13877	13866	13855	13844	13833	11	13822	13811	13800	13789	13778	13767	13756	21.5
8.0	12356	12345	12334	12323	12312	12301	12290	11	12279	12268	12257	12246	12235	12224	12213	21.0
8.5	10842	10831	10820	10809	10798	10787	10776	10	10765	10754	10743	10732	10721	10710	10699	20.5
9.0	9374	9363	9352	9341	9330	9319	9308	10	9297	9286	9275	9264	9253	9242	9231	20.0
9.5	7968	7957	7946	7935	7924	7913	7902	10	7891	7880	7869	7858	7847	7836	7825	19.5
10.0	6641	6630	6619	6608	6597	6586	6575	9	6564	6553	6542	6531	6520	6509	6498	19.0
10.5	5406	5395	5384	5373	5362	5351	5340	8	5329	5318	5307	5296	5285	5274	5263	18.5
11.0	4278	4267	4256	4245	4234	4223	4212	8	4201	4190	4179	4168	4157	4146	4135	18.0
11.5	3269	3258	3247	3236	3225	3214	3203	7	3192	3181	3170	3159	3148	3137	3126	17.5
12.0	2390	2379	2368	2357	2346	2335	2324	6	2313	2302	2291	2280	2269	2258	2247	17.0
12.5	1651	1640	1629	1618	1607	1596	1585	5	1574	1563	1552	1541	1530	1519	1508	16.5
13.0	1060	1049	1038	1027	1016	1005	994	4	983	972	961	950	939	928	917	16.0
13.5	624	613	602	591	580	569	558	2	547	536	525	514	503	492	481	15.5
14.0	348	337	326	315	304	293	282	-1	271	260	249	238	227	216	205	15.0
14.5	234	223	212	201	190	179	168	0	157	146	135	124	113	102	91	14.5
15.0	285	274	263	252	241	230	219	+1	208	197	186	175	164	153	142	14.0
15.5	498	487	476	465	454	443	432	2	421	410	399	388	377	366	355	13.5
16.0	873	862	851	840	829	818	807	3	796	785	774	763	752	741	730	13.0
16.5	1494	1483	1472	1461	1450	1439	1428	4	1417	1406	1395	1384	1373	1362	1351	12.5
17.0	2086	2075	2064	2053	2042	2031	2020	5	2009	1998	1987	1976	1965	1954	1943	12.0
17.5	2912	2901	2890	2879	2868	2857	2846	6	2835	2824	2813	2802	2791	2780	2769	11.5
18.0	3872	3861	3850	3839	3828	3817	3806	7	3795	3784	3773	3762	3751	3740	3729	11.0
18.5	4956	4945	4934	4923	4912	4901	4890	8	4879	4868	4857	4846	4835	4824	4813	10.5
19.0	6151	6140	6129	6118	6107	6096	6085	9	6074	6063	6052	6041	6030	6019	6008	10.0
19.5	7444	7433	7422	7411	7400	7389	7378	9	7367	7356	7345	7334	7323	7312	7301	9.5
20.0	8821	8810	8799	8788	8777	8766	8755	10	8744	8733	8722	8711	8700	8689	8678	9.0
20.5	10267	10256	10245	10234	10223	10212	10201	10	10190	10179	10168	10157	10146	10135	10124	8.5
21.0	11765	11754	11743	11732	11721	11710	11699	11	11688	11677	11666	11655	11644	11633	11622	8.0
21.5	13299	13288	13277	13266	13255	13244	13233	11	13222	13211	13200	13189	13178	13167	13156	7.5
22.0	14852	14841	14830	14819	14808	14797	14786	11	14775	14764	14753	14742	14731	14720	14709	7.0
22.5	16407	16396	16385	16374	16363	16352	16341	11	16330	16319	16308	16297	16286	16275	16264	6.5
23.0	17946	17935	17924	17913	17902	17891	17880	11	17869	17858	17847	17836	17825	17814	17803	6.0
23.5	19452	19441	19430	19419	19408	19397	19386	10	19375	19364	19353	19342	19331	19320	19309	5.5
24.0	20909	20898	20887	20876	20865	20854	20843	10	20832	20821	20810	20799	20788	20777	20766	5.0
24.5	22300	22289	22278	22267	22256	22245	22234	9	22223	22212	22201	22190	22179	22168	22157	4.5
25.0	23611	23600	23589	23578	23567	23556	23545	9	23534	23523	23512	23501	23490	23479	23468	4.0
25.5	24825	24814	24803	24792	24781	24770	24759	8	24748	24737	24726	24715	24704	24693	24682	3.5
26.0	25931	25920	25909	25898	25887	25876	25865	7	25854	25843	25832	25821	25810	25799	25788	3.0
26.5	26915	26904	26893	26882	26871	26860	26849	6	26838	26827	26816	26805	26794	26783	26772	2.5
27.0	27767	27756	27745	27734	27723	27712	27701	5	27690	27679	27668	27657	27646	27635	27624	2.0
27.5	28477	28466	28455	28444	28433	28422	28411	4	28400	28389	28378	28367	28356	28345	28334	1.5
28.0	29038	29027	29016	29005	28994	28983	28972	3	28961	28950	28939	28928	28917	28906	28895	1.0
28.5	29443	29432	29421	29410	29399	29388	29377	2	29366	29355	29344	29333	29322	29311	29300	0.5
29.0	29687	29676	29665	29654	29643	29632	29621	+1	29610	29599	29588	29577	29566	29555	29544	0.0
Succ.	0	1	2	3	4	5	6		7	8	9	10	11	12	13	
	141	140	139	138	137	136	135	v	134	133	132	131	130	129	128	Arg.

Arg.	100	101	102	103	104	105	106	v	107	108	109	110	111	112	113	Succ.
	41	40	39	38	37	36	35		34	33	32	31	30	29	28	
d																d
0.0	29728	29727	29726	29725	29724	29723	29722	-1	29722	29721	29720	29719	29718	29717	29716	29.0
0.5	29530	29528	29526	29524	29522	29520	29518	2	29516	29514	29512	29510	29508	29506	29504	28.5
1.0	29171	29168	29165	29162	29159	29156	29152	3	29149	29146	29143	29140	29137	29133	29130	28.0
1.5	28655	28651	28647	28642	28638	28634	28630	4	28626	28621	28617	28613	28608	28604	28600	27.5
2.0	27987	27982	27977	27971	27966	27961	27956	5	27951	27945	27940	27935	27929	27924	27919	27.0
2.5	27175	27169	27163	27156	27150	27144	27138	6	27132	27125	27119	27113	27106	27100	27094	26.5
3.0	26228	26221	26214	26207	26200	26192	26185	7	26178	26171	26164	26157	26149	26142	26135	26.0
3.5	25156	25148	25140	25132	25124	25116	25108	8	25100	25092	25084	25076	25068	25060	25052	25.5
4.0	23972	23963	23954	23946	23937	23928	23919	9	23911	23902	23893	23884	23876	23867	23858	25.0
4.5	22688															

TABLE 27 (cont.). Cols. 30-44, 135-149.

Arg. 27.

TABLE 27 (cont.). Cols. 45-59, 120-134.

Arg. 27.

Arg.	30	31	32	33	34	35	36	37	v	38	39	40	41	42	43	44	Succ.
	228	227	226	225	224	223	222	221		220	219	218	217	216	215	214	
d	41495	41495	41495	41495	41495	41495	41494	41494	0	41494	41494	41494	41494	41494	41494	41494	34.5
0.0	41392	41391	41390	41390	41389	41388	41388	41387	-1	41386	41385	41385	41384	41383	41382	41382	34.0
0.5	41122	41121	41120	41118	41117	41116	41114	41113	1	41112	41110	41109	41107	41106	41104	41103	33.5
1.0	40689	40687	40685	40683	40681	40679	40677	40675	2	40673	40671	40668	40666	40664	40662	40660	33.0
1.5	40094	40092	40089	40086	40084	40081	40078	40076	3	40073	40070	40068	40065	40063	40060	40057	32.5
2.0	39344	39341	39337	39334	39331	39328	39324	39321	3	39318	39315	39312	39308	39305	39302	39299	32.0
2.5	38444	38440	38436	38432	38428	38425	38421	38417	4	38413	38410	38406	38402	38398	38394	38391	31.5
3.0	37401	37397	37392	37388	37384	37380	37375	37371	4	37366	37362	37358	37354	37349	37345	37341	31.0
3.5	36224	36219	36214	36210	36205	36200	36195	36190	5	36186	36181	36176	36171	36166	36161	36157	30.5
4.0	34923	34918	34912	34907	34902	34897	34891	34886	5	34881	34876	34870	34865	34860	34854	34849	30.0
4.5	33508	33502	33496	33491	33485	33479	33474	33468	6	33462	33457	33451	33445	33439	33434	33428	29.5
5.0	31990	31984	31978	31972	31966	31960	31954	31948	6	31942	31936	31930	31924	31917	31911	31905	29.0
5.5	30383	30376	30370	30364	30357	30351	30344	30338	6	30332	30325	30319	30312	30306	30300	30293	28.5
6.0	28698	28691	28685	28678	28672	28665	28658	28652	7	28645	28638	28632	28625	28618	28612	28605	28.0
6.5	26950	26943	26936	26930	26923	26916	26909	26902	7	26895	26888	26881	26875	26868	26861	26854	27.5
7.0	25153	25146	25139	25132	25125	25118	25111	25104	7	25097	25090	25083	25076	25069	25062	25055	27.0
7.5	23322	23314	23307	23300	23293	23286	23279	23272	7	23264	23257	23250	23243	23236	23229	23222	26.5
8.0	21470	21463	21456	21449	21442	21434	21427	21420	7	21413	21406	21398	21391	21384	21377	21370	26.0
8.5	19614	19607	19600	19593	19586	19579	19571	19564	7	19557	19550	19543	19536	19528	19521	19514	25.5
9.0	17769	17762	17755	17748	17741	17733	17726	17719	7	17712	17705	17698	17691	17684	17676	17669	25.0
9.5	15942	15935	15928	15921	15914	15907	15900	15893	7	15886	15879	15872	15865	15858	15851	15844	24.5
10.0	14169	14162	14155	14148	14141	14134	14127	14120	7	14113	14106	14101	14094	14088	14081	14074	24.0
10.5	12444	12437	12431	12424	12417	12410	12403	12396	7	12389	12382	12375	12368	12361	12354	12347	23.5
11.0	10787	10781	10775	10768	10762	10755	10748	10741	6	10734	10727	10720	10713	10706	10700	10693	23.0
11.5	9213	9207	9201	9195	9189	9183	9177	9171	6	9165	9159	9153	9147	9141	9135	9129	22.5
12.0	7734	7728	7722	7716	7710	7704	7698	7692	6	7686	7680	7674	7668	7662	7656	7650	22.0
12.5	6361	6355	6349	6343	6337	6331	6325	6319	5	6313	6307	6301	6295	6289	6283	6277	21.5
13.0	5107	5101	5095	5089	5083	5077	5071	5065	5	5059	5053	5047	5041	5035	5029	5023	21.0
13.5	3981	3975	3969	3963	3957	3951	3945	3939	4	3933	3927	3921	3915	3909	3903	3897	20.5
14.0	2992	2986	2980	2974	2968	2962	2956	2950	4	2944	2938	2932	2926	2920	2914	2908	20.0
14.5	2149	2143	2137	2131	2125	2119	2113	2107	3	2101	2095	2089	2083	2077	2071	2065	19.5
15.0	1458	1452	1446	1440	1434	1428	1422	1416	2	1410	1404	1398	1392	1386	1380	1374	19.0
15.5	925	919	913	907	901	895	889	883	2	877	871	865	859	853	847	841	18.5
16.0	554	548	542	536	530	524	518	512	-1	506	500	494	488	482	476	470	18.0
16.5	348	342	336	330	324	318	312	306	0	300	294	288	282	276	270	264	17.5
17.0	310	304	298	292	286	280	274	268	0	262	256	250	244	238	232	226	17.0
17.5	439	433	427	421	415	409	403	397	+1	391	385	379	373	367	361	355	16.5
18.0	733	727	721	715	709	703	697	691	1	685	679	673	667	661	655	649	16.0
18.5	1192	1186	1180	1174	1168	1162	1156	1150	1	1144	1138	1132	1126	1120	1114	1108	15.5
19.0	1811	1805	1799	1793	1787	1781	1775	1769	3	1763	1757	1751	1745	1739	1733	1727	15.0
19.5	2585	2579	2573	2567	2561	2555	2549	2543	3	2537	2531	2525	2519	2513	2507	2501	14.5
20.0	3507	3501	3495	3489	3483	3477	3471	3465	4	3459	3453	3447	3441	3435	3429	3423	14.0
20.5	4571	4565	4559	4553	4547	4541	4535	4529	4	4523	4517	4511	4505	4499	4493	4487	13.5
21.0	5767	5761	5755	5749	5743	5737	5731	5725	5	5719	5713	5707	5701	5695	5689	5683	13.0
21.5	7086	7080	7074	7068	7062	7056	7050	7044	5	7038	7032	7026	7020	7014	7008	7002	12.5
22.0	8518	8512	8506	8500	8494	8488	8482	8476	5	8470	8464	8458	8452	8446	8440	8434	12.0
22.5	10050	10044	10038	10032	10026	10020	10014	10008	6	10002	9996	9990	9984	9978	9972	9966	11.5
23.0	11670	11664	11658	11652	11646	11640	11634	11628	6	11622	11616	11610	11604	11598	11592	11586	11.0
23.5	13366	13360	13354	13348	13342	13336	13330	13324	7	13318	13312	13306	13300	13294	13288	13282	10.5
24.0	15122	15116	15110	15104	15098	15092	15086	15080	7	15074	15068	15062	15056	15050	15044	15038	10.0
24.5	16925	16919	16913	16907	16901	16895	16889	16883	7	16877	16871	16865	16859	16853	16847	16841	9.5
25.0	18761	18755	18749	18743	18737	18731	18725	18719	7	18713	18707	18701	18695	18689	18683	18677	9.0
25.5	20614	20608	20602	20596	20590	20584	20578	20572	7	20566	20560	20554	20548	20542	20536	20530	8.5
26.0	22469	22463	22457	22451	22445	22439	22433	22427	7	22421	22415	22409	22403	22397	22391	22385	8.0
26.5	24312	24306	24300	24294	24288	24282	24276	24270	7	24264	24258	24252	24246	24240	24234	24228	7.5
27.0	26127	26121	26115	26109	26103	26097	26091	26085	7	26079	26073	26067	26061	26055	26049	26043	7.0
27.5	27899	27893	27887	27881	27875	27869	27863	27857	7	27851	27845	27839	27833	27827	27821	27815	6.5
28.0	29615	29609	29603	29597	29591	29585	29579	29573	6	29567	29561	29555	29549	29543	29537	29531	6.0
28.5	31259	31253	31247	31241	31235	31229	31223	31217	6	31211	31205	31199	31193	31187	31181	31175	5.5
29.0	32820	32814	32808	32802	32796	32790	32784	32778	6	32772	32766	32760	32754	32748	32742	32736	5.0
29.5	34284	34278	34272	34266	34260	34254	34248	34242	5	34236	34230	34224	34218	34212	34206	34200	4.5
30.0	35639	35633	35627	3													

TABLES OF THE MOON. SECT. III.

LONGITUDE SINGLE ENTRY.

TABLE 27 (cont.). Cols. 60-74, 105-119.

Arg. 27.

TABLE 27 (cont.). Cols. 75-104.

Arg. 27.

Arg.	60	61	62	63	64	65	66	67	v	68	69	70	71	72	73	74	Succ.
	198	197	196	195	194	193	192	191		190	189	188	187	186	185	184	
d	41492	41491	41491	41491	41491	41491	41491	41490	0	41490	41490	41490	41490	41490	41490	41489	d
0.0	41369	41368	41368	41367	41366	41365	41364	41363	-1	41363	41362	41361	41360	41359	41358	41358	34.5
0.5	41080	41079	41078	41076	41075	41073	41072	41070	1	41069	41067	41066	41064	41063	41062	41060	34.0
1.0	40628	40626	40624	40621	40619	40617	40615	40613	2	40611	40609	40607	40605	40603	40601	40598	33.5
1.5	40015	40012	40009	40007	40004	40001	39999	39996	3	39993	39990	39988	39985	39982	39980	39977	32.5
2.0	39247	39243	39240	39237	39234	39230	39227	39224	3	39220	39217	39214	39210	39207	39204	39201	32.0
2.5	38330	38326	38322	38318	38314	38310	38306	38303	4	38299	38295	38291	38287	38283	38280	38276	31.5
3.0	37271	37266	37262	37258	37253	37249	37245	37240	4	37236	37232	37227	37223	37218	37214	37210	31.0
3.5	36079	36074	36069	36064	36060	36055	36050	36045	5	36040	36035	36030	36025	36020	36016	36011	30.5
4.0	34764	34759	34753	34748	34743	34737	34732	34727	5	34721	34716	34711	34705	34700	34695	34689	30.0
4.5	33336	33331	33325	33319	33314	33308	33302	33296	6	33290	33285	33279	33273	33268	33262	33256	29.5
5.0	31808	31802	31796	31790	31783	31777	31771	31765	6	31759	31753	31747	31741	31734	31728	31722	29.0
5.5	30191	30184	30178	30171	30165	30158	30152	30146	6	30139	30133	30126	30120	30114	30107	30101	28.5
6.0	28498	28491	28484	28478	28471	28464	28458	28451	7	28444	28438	28431	28424	28418	28411	28404	28.0
6.5	26744	26737	26730	26723	26716	26709	26702	26695	7	26688	26682	26675	26668	26661	26654	26647	27.5
7.0	24942	24935	24928	24920	24913	24906	24899	24892	7	24885	24878	24871	24864	24857	24850	24843	27.0
7.5	23107	23100	23093	23086	23078	23071	23064	23057	7	23050	23043	23036	23028	23021	23014	23007	26.5
8.0	21254	21247	21240	21233	21226	21218	21211	21204	7	21197	21190	21182	21175	21168	21161	21154	26.0
8.5	19399	19392	19385	19378	19370	19363	19356	19349	7	19342	19334	19327	19320	19313	19306	19299	25.5
9.0	17556	17549	17542	17534	17527	17520	17513	17506	7	17499	17492	17485	17478	17471	17464	17456	25.0
9.5	15740	15733	15726	15719	15712	15705	15698	15691	7	15684	15677	15670	15663	15656	15649	15642	24.5
10.0	13966	13959	13952	13945	13938	13932	13925	13918	7	13911	13905	13898	13891	13884	13877	13871	24.0
10.5	12247	12241	12234	12228	12221	12215	12208	12202	7	12195	12189	12182	12176	12169	12162	12156	23.5
11.0	10600	10594	10587	10581	10575	10569	10562	10556	6	10550	10544	10538	10531	10525	10519	10513	23.0
11.5	9036	9030	9024	9018	9012	9006	9001	8995	6	8989	8983	8977	8971	8965	8960	8954	22.5
12.0	7568	7562	7557	7552	7546	7541	7535	7530	5	7524	7519	7514	7508	7503	7497	7492	22.0
12.5	6209	6204	6199	6194	6189	6184	6179	6174	5	6169	6164	6159	6154	6149	6144	6139	21.5
13.0	4969	4964	4960	4955	4951	4946	4942	4937	5	4933	4928	4924	4919	4914	4910	4905	21.0
13.5	3858	3854	3850	3846	3842	3838	3834	3830	4	3826	3822	3818	3814	3810	3806	3802	20.5
14.0	2886	2883	2879	2876	2872	2868	2865	2862	3	2858	2855	2852	2848	2845	2841	2838	20.0
14.5	2060	2058	2055	2052	2049	2046	2043	2040	3	2037	2034	2032	2029	2026	2023	2020	19.5
15.0	1388	1385	1383	1381	1378	1376	1374	1372	2	1369	1367	1365	1362	1360	1358	1356	19.0
15.5	873	872	870	868	867	865	863	862	2	860	858	857	855	853	852	850	18.5
16.0	522	521	520	518	517	516	515	514	-1	513	512	511	510	509	508	507	18.0
16.5	335	335	334	334	334	333	333	333	0	332	331	331	331	330	330	330	17.5
17.0	316	317	317	317	317	318	318	318	0	318	319	319	319	320	320	320	17.0
17.5	464	465	466	467	468	469	470	471	+1	472	472	473	474	475	476	477	16.5
18.0	778	780	782	783	785	786	788	789	2	791	792	794	795	797	799	800	16.0
18.5	1256	1258	1260	1262	1265	1267	1269	1271	2	1273	1275	1278	1280	1282	1284	1286	15.5
19.0	1893	1896	1898	1901	1904	1907	1910	1912	3	1915	1918	1921	1924	1926	1929	1932	15.0
19.5	2684	2688	2691	2694	2698	2701	2704	2708	3	2711	2715	2718	2722	2725	2728	2732	14.5
20.0	3624	3628	3632	3635	3639	3643	3647	3651	4	3655	3659	3663	3667	3671	3675	3679	14.0
20.5	4703	4708	4712	4716	4721	4725	4730	4734	4	4739	4743	4748	4752	4757	4761	4766	13.5
21.0	5915	5920	5924	5929	5934	5939	5944	5949	5	5954	5959	5964	5969	5974	5979	5984	13.0
21.5	7248	7253	7258	7264	7269	7274	7279	7285	5	7291	7296	7301	7307	7312	7318	7323	12.5
22.0	8691	8697	8703	8709	8715	8720	8726	8732	6	8738	8744	8750	8755	8761	8767	8773	12.0
22.5	10234	10240	10247	10253	10259	10265	10271	10277	6	10284	10290	10296	10302	10308	10314	10321	11.5
23.0	11864	11870	11877	11883	11890	11896	11903	11909	6	11916	11922	11929	11935	11942	11948	11955	11.0
23.5	13567	13574	13580	13587	13594	13601	13607	13614	7	13621	13628	13634	13641	13648	13655	13661	10.5
24.0	15330	15336	15343	15350	15357	15364	15371	15378	7	15385	15392	15399	15406	15413	15420	15427	10.0
24.5	17138	17145	17152	17159	17166	17173	17180	17187	7	17194	17201	17208	17215	17222	17229	17237	9.5
25.0	18976	18983	18990	18997	19005	19012	19019	19026	7	19033	19040	19048	19055	19062	19069	19076	9.0
25.5	20830	20837	20844	20852	20859	20866	20873	20880	7	20888	20895	20902	20909	20916	20923	20931	8.5
26.0	22684	22692	22699	22706	22713	22720	22727	22735	7	22742	22749	22756	22763	22770	22778	22785	8.0
26.5	24524	24532	24539	24546	24553	24560	24567	24575	7	24581	24588	24595	24602	24609	24616	24624	7.5
27.0	26335	26342	26349	26356	26363	26370	26377	26384	7	26391	26398	26405	26412	26419	26426	26433	7.0
27.5	28102	28108	28115	28122	28129	28135	28142	28149	7	28156	28162	28169	28176	28182	28189	28196	6.5
28.0	29810	29816	29823	29829	29836	29842	29848	29855	6	29861	29868	29874	29881	29887	29894	29900	6.0
28.5	31445	31452	31458	31464	31470	31476	31482	31489	6	31495	31501	31507	31513	31520	31526	31532	5.5
29.0	32995	33001	33007	33013	33019	33024	33030	33036	6	33042	33048	33054	33059	33065	33071	33077	5.0
29.5	34447	34452	34458	34463	34469	34474	34480	34485	5	34490	34496	34501	34507	34512	34517	34523	4.5
30.0	35789	35794	35799	35804	35809	3581											

TABLE 27 (cont.). Cols. 180-192, 245-257.

Arg. 27.

Arg.	180	181	182	183	184	185	186	v	187	188	189	190	191	192	Succ.
	78	77	76	75	74	73	72		71	70	69	68	67	66	
0.0	41455	41455	41454	41454	41454	41453	41453	0	41452	41452	41451	41451	41450	41450	34.0
0.5	41255	41254	41253	41252	41251	41250	41249	-1	41248	41246	41245	41244	41243	41242	33.5
1.0	40890	40888	40887	40885	40883	40881	40880	2	40878	40876	40874	40873	40871	40869	33.0
1.5	40362	40360	40358	40355	40353	40350	40348	2	40346	40343	40341	40339	40336	40334	32.5
2.0	39676	39674	39671	39668	39665	39662	39659	3	39656	39653	39650	39647	39644	39641	32.0
2.5	38838	38835	38831	38827	38824	38820	38817	4	38813	38810	38806	38803	38799	38796	31.5
3.0	37854	37850	37846	37842	37838	37834	37830	4	37826	37822	37817	37813	37809	37805	31.0
3.5	36732	36728	36723	36719	36714	36709	36705	5	36700	36696	36691	36686	36682	36677	30.5
4.0	35482	35477	35472	35467	35462	35457	35452	5	35446	35441	35436	35431	35426	35421	30.0
4.5	34113	34108	34102	34097	34091	34086	34080	6	34075	34069	34063	34058	34052	34047	29.5
5.0	32637	32631	32625	32620	32614	32608	32602	6	32596	32590	32584	32578	32572	32566	29.0
5.5	31066	31060	31053	31047	31041	31035	31028	6	31022	31016	31010	31003	30997	30991	28.5
6.0	29412	29406	29399	29392	29386	29379	29373	7	29366	29360	29353	29346	29340	29333	28.0
6.5	27689	27682	27675	27668	27662	27655	27648	7	27641	27635	27628	27621	27614	27607	27.5
7.0	25911	25904	25897	25890	25883	25876	25869	7	25862	25855	25848	25841	25834	25827	27.0
7.5	24092	24084	24077	24070	24063	24056	24049	7	24042	24035	24028	24020	24013	24006	26.5
8.0	22247	22240	22232	22225	22218	22211	22204	7	22196	22189	22182	22175	22168	22160	26.0
8.5	20391	20384	20377	20369	20362	20355	20348	7	20341	20333	20326	20319	20312	20305	25.5
9.0	18539	18532	18525	18518	18510	18503	18496	7	18489	18482	18475	18468	18460	18453	25.0
9.5	16707	16700	16693	16686	16678	16671	16664	7	16657	16650	16643	16636	16629	16622	24.5
10.0	14908	14901	14894	14888	14881	14874	14867	7	14860	14853	14846	14840	14833	14826	24.0
10.5	13158	13152	13145	13138	13131	13124	13118	7	13111	13105	13098	13092	13085	13078	23.5
11.0	11472	11465	11459	11452	11446	11440	11433	6	11427	11420	11414	11408	11401	11395	23.0
11.5	9861	9855	9849	9843	9837	9831	9825	6	9819	9813	9807	9800	9794	9788	22.5
12.0	8340	8335	8329	8323	8318	8312	8306	6	8301	8295	8289	8284	8278	8272	22.0
12.5	6922	6917	6911	6906	6901	6896	6890	5	6885	6880	6874	6869	6864	6859	21.5
13.0	5617	5612	5607	5602	5598	5593	5588	5	5583	5578	5573	5569	5564	5559	21.0
13.5	4436	4431	4427	4423	4418	4414	4410	4	4406	4401	4397	4393	4388	4384	20.5
14.0	3388	3385	3381	3377	3373	3370	3366	4	3362	3358	3354	3351	3347	3343	20.0
14.5	2484	2480	2477	2474	2471	2468	2464	3	2461	2458	2455	2452	2448	2445	19.5
15.0	1728	1725	1723	1720	1718	1715	1712	3	1709	1707	1704	1701	1699	1697	19.0
15.5	1128	1126	1124	1122	1120	1118	1116	2	1114	1112	1110	1108	1106	1104	18.5
16.0	689	688	686	685	684	682	681	1	680	678	677	676	674	673	18.0
16.5	414	414	413	412	411	411	410	-1	409	408	408	407	406	406	17.5
17.0	306	306	306	305	305	305	305	0	305	305	305	305	305	305	17.0
17.5	364	365	365	366	366	367	368	+1	368	369	369	370	371	371	16.5
18.0	590	591	592	593	595	596	597	1	598	600	601	602	603	604	16.0
18.5	980	982	984	986	988	990	991	2	993	995	997	999	1001	1002	15.5
19.0	1533	1535	1538	1540	1542	1545	1547	2	1550	1552	1555	1557	1560	1562	15.0
19.5	2242	2245	2248	2251	2254	2257	2260	3	2264	2267	2270	2273	2276	2279	14.5
20.0	3103	3107	3110	3114	3118	3121	3125	4	3129	3132	3136	3140	3143	3147	14.0
20.5	4109	4113	4117	4121	4126	4130	4134	4	4138	4142	4146	4151	4155	4159	13.5
21.0	5251	5256	5260	5265	5270	5274	5279	5	5284	5288	5293	5298	5302	5307	13.0
21.5	6520	6525	6530	6536	6541	6546	6551	5	6556	6561	6566	6572	6577	6582	12.5
22.0	7906	7912	7917	7923	7928	7934	7940	6	7945	7951	7956	7962	7968	7973	12.0
22.5	9398	9404	9410	9416	9421	9427	9433	6	9439	9445	9451	9457	9463	9469	11.5
23.0	10982	10989	10995	11001	11008	11014	11020	6	11026	11033	11039	11045	11052	11058	11.0
23.5	12648	12654	12661	12668	12674	12681	12687	7	12694	12700	12707	12714	12721	12727	10.5
24.0	14380	14387	14394	14401	14408	14414	14421	7	14428	14435	14442	14449	14456	14462	10.0
24.5	16166	16173	16180	16187	16194	16201	16208	7	16215	16222	16229	16236	16243	16250	9.5
25.0	17990	17997	18004	18011	18018	18025	18032	-7	18040	18047	18054	18061	18068	18075	9.0
25.5	19837	19844	19852	19859	19866	19873	19880	7	19887	19895	19902	19909	19916	19923	8.5
26.0	21693	21700	21708	21715	21722	21729	21736	7	21744	21751	21758	21765	21772	21780	8.0
26.5	23543	23550	23557	23564	23572	23579	23586	7	23593	23600	23607	23614	23622	23629	7.5
27.0	25371	25378	25385	25392	25399	25406	25413	7	25420	25427	25434	25441	25449	25456	7.0
27.5	27163	27170	27177	27184	27191	27197	27204	7	27211	27218	27225	27232	27239	27246	6.5
28.0	28904	28911	28918	28924	28931	28937	28944	7	28951	28957	28964	28970	28977	28984	6.0
28.5	30580	30587	30593	30600	30606	30612	30618	6	30625	30631	30638	30644	30650	30657	5.5
29.0	32178	32184	32190	32196	32202	32208	32214	6	32220	32226	32232	32238	32244	32250	5.0
29.5	33684	33689	33695	33700	33706	33712	33717	6	33723	33729	33734	33740	33746	33751	4.5
30.0	35086	35091	35096	35101	35106	35112	35117	5	35122	35127	35132	35138	35143	35148	4.0
30.5	36372	36377	36382	36387	36391	36396	36401	5	36405	36410	36415	36420	36424	36429	3.5
31.0	37534	37538	37542	37546	37551	37555	37559	4	37563	37568	37572	37576	37580	37584	3.0
31.5	38560	38563	38567	38571	38574	38578	38582	4	38585	38589	38593	38596	38600	38604	2.5
32.0	39442	39445	39448	39452	39455	39458	39461	3	39464	39467	39470	39473	39476	39480	2.0
32.5	40174	40176	40179	40182	40184	40187	40189	3	40192	40194	40197	40199	40202	40204	1.5
33.0	40749	40751	40753	40755	40757	40759	40761	2	40763	40765	40767	40768	40770	40772	1.0
33.5	41164	41165	41166	41167	41169	41170	41171	1	41172	41174	41175	41176	41178	41179	0.5
34.0	41413	41414	41414	41415	41416	41417	41417	+1	41418	41418	41419	41420	41420	41421	0.0
Succ.	1	2	3	4											

TABLE 27 (concl.). Cols. 206-231.

Arg. 27.

TABLE 28. Cols. 0-50, 83-133.

Arg. 28.

Arg.	206	207	208	209	210	211	212	v	213	214	215	216	217	218	
d	52	51	50	49	48	47	46		45	44	43	42	41	40	Succ.
0.0	41443	41442	41442	41441	41441	41440	41440	-1	41439	41439	41438	41438	41437	41436	34.0
0.5	41226	41225	41224	41222	41221	41220	41219	1	41218	41217	41216	41214	41213	41212	33.5
1.0	40844	40842	40840	40839	40837	40835	40833	2	40832	40830	40828	40826	40824	40822	33.0
1.5	40300	40298	40295	40293	40290	40288	40286	2	40283	40281	40278	40276	40274	40271	32.5
2.0	39599	39596	39593	39590	39587	39584	39581	3	39578	39575	39572	39569	39566	39563	32.0
2.5	38746	38742	38738	38735	38731	38728	38724	4	38720	38717	38713	38710	38706	38702	31.5
3.0	37747	37743	37739	37735	37731	37727	37722	4	37718	37714	37710	37706	37702	37698	31.0
3.5	36612	36607	36603	36598	36593	36589	36584	5	36579	36575	36570	36565	36561	36556	30.5
4.0	35349	35344	35339	35334	35329	35324	35319	5	35313	35308	35303	35298	35293	35288	30.0
4.5	33969	33964	33958	33953	33947	33941	33936	6	33930	33925	33919	33914	33908	33902	29.5
5.0	32483	32477	32471	32465	32459	32453	32447	6	32441	32435	32429	32423	32417	32411	29.0
5.5	30903	30896	30890	30884	30878	30871	30865	6	30859	30852	30846	30840	30834	30827	28.5
6.0	29241	29235	29228	29222	29215	29208	29202	7	29195	29189	29182	29175	29169	29162	28.0
6.5	27512	27505	27498	27492	27485	27478	27471	7	27464	27457	27449	27441	27433	27425	27.5
7.0	25729	25722	25715	25708	25701	25694	25687	7	25680	25673	25666	25659	25652	25645	27.0
7.5	23907	23900	23892	23885	23878	23871	23864	7	23857	23850	23842	23835	23828	23821	26.5
8.0	22060	22053	22045	22038	22031	22024	22017	7	22010	22002	21995	21988	21981	21974	26.0
8.5	20204	20197	20190	20182	20175	20168	20161	7	20154	20146	20139	20132	20125	20118	25.5
9.0	18353	18346	18339	18332	18325	18318	18311	7	18304	18296	18289	18282	18275	18268	25.0
9.5	16524	16516	16509	16502	16495	16488	16481	7	16474	16467	16460	16453	16446	16439	24.5
10.0	14730	14723	14716	14709	14702	14695	14688	7	14682	14675	14668	14661	14654	14647	24.0
10.5	12985	12979	12972	12965	12958	12951	12944	7	12937	12930	12923	12916	12909	12902	23.5
11.0	11306	11299	11293	11286	11280	11274	11267	6	11261	11255	11248	11242	11236	11229	23.0
11.5	9704	9698	9692	9686	9680	9674	9668	6	9662	9656	9650	9644	9638	9632	22.5
12.0	8193	8187	8181	8176	8170	8164	8159	6	8153	8148	8142	8136	8130	8125	22.0
12.5	6785	6780	6775	6769	6764	6759	6754	5	6748	6743	6738	6733	6728	6722	21.5
13.0	5492	5487	5482	5478	5473	5468	5463	5	5458	5454	5449	5444	5440	5435	21.0
13.5	4324	4320	4316	4311	4307	4303	4298	4	4294	4290	4286	4282	4277	4273	20.5
14.0	3291	3287	3283	3280	3276	3272	3268	4	3265	3261	3257	3254	3250	3246	20.0
14.5	2401	2397	2394	2391	2388	2385	2382	3	2378	2375	2372	2369	2366	2363	19.5
15.0	1660	1658	1655	1653	1650	1648	1645	3	1643	1640	1638	1635	1633	1630	19.0
15.5	1077	1075	1073	1071	1069	1067	1065	2	1063	1061	1059	1057	1055	1054	18.5
16.0	654	653	651	650	649	648	646	1	645	644	642	641	640	638	18.0
16.5	396	395	394	393	392	392	392	-1	391	390	389	388	388	387	17.5
17.0	304	304	304	304	304	304	304	0	304	304	304	304	304	304	17.0
17.5	380	380	381	381	382	383	383	+1	384	384	385	386	387	387	16.5
18.0	622	623	624	626	627	628	629	1	631	632	633	634	636	637	16.0
18.5	1029	1031	1033	1036	1038	1040	1042	2	1044	1046	1048	1050	1052	1054	15.5
19.0	1597	1600	1602	1605	1607	1610	1612	3	1615	1617	1620	1622	1625	1627	15.0
19.5	2322	2325	2328	2332	2335	2338	2341	3	2344	2347	2350	2353	2356	2360	14.5
20.0	3198	3202	3206	3209	3213	3217	3220	4	3224	3228	3231	3235	3239	3242	14.0
20.5	4218	4222	4226	4231	4235	4239	4243	4	4248	4252	4256	4260	4264	4269	13.5
21.0	5373	5378	5383	5387	5392	5397	5402	5	5406	5411	5416	5420	5425	5430	13.0
21.5	6655	6660	6665	6670	6675	6681	6686	5	6691	6696	6702	6707	6712	6717	12.5
22.0	8052	8057	8063	8068	8074	8080	8085	6	8091	8097	8102	8108	8114	8119	12.0
22.5	9553	9559	9565	9571	9577	9583	9589	6	9595	9601	9607	9613	9619	9625	11.5
23.0	11147	11153	11159	11166	11172	11178	11185	6	11191	11197	11204	11210	11216	11223	11.0
23.5	12819	12826	12833	12839	12846	12853	12859	7	12866	12872	12879	12886	12892	12899	10.5
24.0	14558	14565	14572	14579	14586	14592	14599	7	14606	14613	14620	14627	14634	14640	10.0
24.5	16348	16355	16362	16369	16376	16383	16390	7	16397	16404	16411	16418	16425	16432	9.5
25.0	18175	18182	18189	18196	18204	18211	18218	7	18225	18232	18239	18246	18254	18261	9.0
25.5	20024	20031	20038	20046	20053	20060	20067	7	20074	20082	20089	20096	20103	20110	8.5
26.0	21880	21888	21895	21902	21909	21916	21924	7	21931	21938	21945	21952	21959	21966	8.0
26.5	23728	23736	23743	23750	23757	23764	23771	7	23778	23786	23793	23800	23807	23814	7.5
27.0	25554	25561	25568	25575	25582	25589	25596	7	25603	25610	25617	25624	25631	25638	7.0
27.5	27341	27348	27355	27362	27369	27376	27382	7	27389	27396	27403	27410	27416	27423	6.5
28.0	29076	29083	29090	29096	29103	29109	29116	7	29123	29129	29136	29142	29149	29156	6.0
28.5	30745	30752	30758	30764	30770	30777	30783	6	30789	30796	30802	30808	30815	30821	5.5
29.0	32334	32340	32346	32352	32358	32364	32370	6	32376	32382	32388	32394	32400	32406	5.0
29.5	33830	33835	33841	33846	33852	33858	33863	6	33869	33874	33880	33886	33891	33897	4.5
30.0	35221	35226	35231	35236	35241	35246	35252	5	35257	35262	35267	35272	35277	35282	4.0
30.5	36495	36500	36505	36509	36514	36519	36523	5	36528	36533	36537	36542	36547	36551	3.5
31.0	37743	37748	37752	37756	37760	37764	37768	4	37772	37777	37781	37785	37789	37793	3.0
31.5	38655	38659	38662	38666	38670	38673	38677	4	38680	38684	38688	38691	38695	38699	2.5
32.0	39523	39526	39529	39532	39535	39538	39541	3	39544	39547	39550	39553	39556	39559	2.0
32.5	40239	40242	40244	40246	40249	40251	40254	2	40256	40259	40261	40264	40266	40269	1.5
33.0	40798	40800	40802	40804	40806	40808	40810	2	40811	40813	40815	40817	40819	40821	1.0
33.5	41196	41197	41199	41200	41201	41202	41204	1	41205	41206	41207	41208	41210	41211	0.5
34.0	41429	41430	41430	41431	41431	41432	41432	+1	414						

TABLE 28 (concl.). Cols. 51-82, 134-177.

Arg. 28.

Table with columns Arg., 51-66, v, and Succ. containing numerical data for Arg. 28.

Table with columns Arg., 134-144, v, and Succ. containing numerical data for Arg. 28.

Table with columns Arg., 145-155, v, and Succ. containing numerical data for Arg. 28.

TABLE 29. Cols. 0-15, 94-109.

Arg. 29.

Table with columns Arg., 0-15, v, and Succ. containing numerical data for Arg. 29.

B.

TABLE 29 (cont.). Cols. 16-30, 79-93.

Arg. 29.

TABLE 29 (cont.). Cols. 31-46, 63-78.

Arg. 29.

Arg.	16	17	18	19	20	21	22	23	v	24	25	26	27	28	29	30	Succ.
	191	190	189	188	187	186	185	184		183	182	181	180	179	178	177	Succ.
d																	d
0.0	5847	5847	5847	5847	5847	5847	5847	5847	o	5847	5847	5847	5847	5847	5847	5847	29.0
0.5	5829	5828	5828	5828	5828	5828	5828	5827	o	5827	5827	5827	5826	5826	5826	5826	28.5
1.0	5777	5777	5776	5776	5776	5775	5775	5775	o	5774	5774	5774	5773	5773	5772	5772	28.0
1.5	5694	5693	5693	5692	5692	5691	5691	5690	o	5690	5689	5689	5688	5688	5687	5687	27.5
2.0	5579	5578	5578	5577	5576	5576	5575	5575	-I	5574	5573	5573	5572	5571	5571	5570	27.0
2.5	5435	5434	5433	5433	5432	5431	5430	5430	I	5429	5428	5427	5426	5426	5425	5424	26.5
3.0	5263	5262	5261	5260	5259	5258	5257	5256	I	5256	5255	5254	5253	5252	5251	5250	26.0
3.5	5064	5063	5062	5061	5060	5059	5058	5057	I	5056	5055	5054	5053	5052	5051	5050	25.5
4.0	4842	4841	4840	4839	4838	4837	4836	4834	I	4833	4832	4831	4830	4829	4828	4827	25.0
4.5	4599	4598	4597	4595	4594	4593	4592	4590	I	4589	4588	4587	4586	4584	4583	4582	24.5
5.0	4338	4336	4335	4334	4332	4331	4330	4328	I	4327	4326	4324	4323	4322	4320	4319	24.0
5.5	4060	4059	4058	4056	4055	4054	4052	4051	I	4049	4048	4047	4045	4044	4042	4041	23.5
6.0	3771	3770	3768	3767	3766	3764	3763	3761	I	3760	3758	3757	3756	3754	3753	3751	23.0
6.5	3473	3472	3470	3469	3467	3466	3464	3463	I	3462	3460	3459	3457	3456	3454	3453	22.5
7.0	3169	3168	3166	3165	3164	3162	3161	3159	I	3158	3156	3155	3153	3152	3150	3149	22.0
7.5	2864	2862	2861	2859	2858	2856	2855	2854	I	2852	2851	2849	2848	2846	2845	2843	21.5
8.0	2560	2558	2557	2555	2554	2552	2551	2550	I	2548	2547	2545	2544	2542	2541	2539	21.0
8.5	2261	2260	2258	2257	2255	2254	2252	2251	I	2250	2248	2247	2245	2244	2242	2241	20.5
9.0	1970	1969	1968	1966	1965	1964	1962	1961	I	1959	1958	1957	1955	1954	1952	1951	20.0
9.5	1692	1691	1689	1688	1687	1685	1684	1683	I	1682	1680	1679	1678	1676	1675	1674	19.5
10.0	1428	1427	1426	1425	1424	1422	1421	1420	I	1419	1417	1416	1415	1414	1412	1411	19.0
10.5	1183	1182	1181	1180	1179	1178	1176	1175	I	1174	1173	1172	1171	1170	1168	1167	18.5
11.0	959	958	957	956	955	954	953	952	I	951	950	948	947	946	945	944	18.0
11.5	758	757	756	755	754	753	752	751	I	750	750	749	748	747	746	745	17.5
12.0	582	582	581	580	579	578	578	577	I	576	575	574	574	573	572	571	17.0
12.5	435	434	434	433	433	432	431	431	-I	430	429	429	428	428	427	426	16.5
13.0	318	317	317	316	316	315	315	314	o	314	313	313	312	312	311	311	16.0
13.5	230	230	230	230	229	229	229	228	o	228	227	227	226	226	226	226	15.5
14.0	176	175	175	175	175	174	174	174	o	174	174	174	173	173	173	173	15.0
14.5	153	153	153	153	153	153	153	153	o	153	153	153	153	153	153	153	14.5
15.0	163	163	164	164	164	164	164	164	o	164	164	165	165	165	165	165	14.0
15.5	206	206	207	207	207	208	208	208	o	208	209	209	210	210	210	210	13.5
16.0	282	282	282	283	283	284	284	285	o	285	286	286	286	287	288	288	13.0
16.5	388	388	389	390	390	391	391	392	+I	393	393	394	394	395	396	396	12.5
17.0	524	525	526	526	527	528	529	529	I	530	531	532	532	533	534	534	12.0
17.5	689	690	691	692	693	694	695	696	I	696	697	698	699	700	701	702	11.5
18.0	881	882	883	884	885	886	887	888	I	889	890	891	892	893	894	895	11.0
18.5	1097	1098	1099	1100	1101	1102	1104	1105	I	1106	1107	1108	1109	1110	1111	1112	10.5
19.0	1335	1336	1338	1339	1340	1341	1342	1344	I	1345	1346	1347	1348	1350	1351	1352	10.0
19.5	1592	1593	1595	1596	1597	1598	1600	1601	I	1602	1604	1605	1606	1608	1609	1610	9.5
20.0	1865	1867	1868	1869	1871	1872	1873	1875	I	1876	1878	1879	1880	1882	1883	1884	9.0
20.5	2152	2153	2155	2156	2157	2159	2160	2162	I	2163	2164	2166	2167	2169	2170	2172	8.5
21.0	2448	2449	2451	2452	2454	2455	2457	2458	I	2460	2461	2462	2464	2465	2467	2468	8.0
21.5	2750	2752	2753	2755	2756	2758	2759	2760	I	2762	2763	2765	2766	2768	2769	2771	7.5
22.0	3056	3057	3059	3060	3062	3063	3065	3066	I	3068	3069	3070	3072	3073	3075	3076	7.0
22.5	3361	3362	3364	3365	3366	3368	3370	3371	I	3372	3374	3375	3377	3378	3380	3381	6.5
23.0	3661	3663	3664	3666	3667	3668	3670	3671	I	3673	3674	3676	3677	3678	3680	3681	6.0
23.5	3954	3955	3957	3958	3960	3961	3962	3964	I	3965	3966	3968	3969	3971	3972	3974	5.5
24.0	4236	4237	4239	4240	4241	4243	4244	4245	I	4247	4248	4249	4251	4252	4253	4255	5.0
24.5	4594	4595	4596	4598	4599	4600	4601	4602	I	4604	4605	4606	4608	4609	4610	4611	4.5
25.0	4754	4756	4757	4758	4759	4760	4761	4762	I	4764	4765	4766	4767	4768	4770	4771	4.0
25.5	4984	4986	4987	4988	4989	4990	4991	4992	I	4993	4994	4995	4996	4997	4998	4999	3.5
26.0	5192	5193	5194	5195	5196	5197	5198	5198	I	5199	5200	5201	5202	5203	5204	5205	3.0
26.5	5374	5375	5376	5377	5377	5378	5379	5380	I	5380	5381	5382	5383	5385	5385	5385	2.5
27.0	5529	5529	5530	5531	5531	5532	5533	5533	I	5534	5535	5535	5536	5537	5538	5538	2.0
27.5	5655	5655	5656	5656	5657	5657	5658	5658	+I	5659	5659	5660	5660	5661	5662	5662	1.5
28.0	5750	5750	5750	5751	5751	5752	5752	5752	o	5753	5753	5753	5754	5754	5754	5755	1.0
28.5	5813	5813	5814	5814	5814	5814	5814	5815	o	5815	5815	5815	5816	5816	5816	5816	0.5
29.0	5844	5844	5844	5844	5844	5844	5845	5845	o	5845	5845	5845	5845	5845	5845	5845	0.0
Succ.	114	115	116	117	118	119	120	121		122	123	124	125	126	127	128	
	93	92	91	90	89	88	87	86	v	85	84	83	82	81	80	79	Arg.

Arg.	31	32	33	34	35	36	37	38	v	39	40	41	42	43	44	45	46	Succ.
	176	175	174	173	172	171	170	169		168	167	166	165	164	163	162	161	Succ.
d																		d
0.0	5847	5847	5847	5847	5847	5847	5847	5847	o	5847	5847	5847	5847	5847	5847	5847	5847	29.0
0.5	5826	5826	5826	5825	5825	5825	5825	5825	o	5824	5824	5824	5824	5824	5824	5823	5823	28.5
1.0	5772	5772	5771	5771	5771	5770	5770	5770	o	5769	5769	5769	5768	5768	5768	5767	5767	28.0
1.5	5686	5686	5685	5685	5684	5684	5683	5683	o	5682	5682	5681	5681	5680	5680	5679	5679	27.5
2.0	5570	5569	5568	5568	5567	5566	5566	5565	-I	5564	5564	5563	5562	5562	5561	5561	5560	27.0
2.5	5423	5423	5422	5421	5420	5419	5419	5418	I	5417	5416	5416	5415	5414	5413	5412	5412	26.5
3.0	5249	5248	5247	5246	5246	5245	5244	5243	I	5242	5241	5240	5239	5238	5237	5236	5236	26.0
3.5	5049	5048	5047	5046	5045	5044	5043	5042	I	5041	5040	5039	5038	5037	5036	5035	5034	25.5
4.0	4826	4824	4823	4822	4821	4820	4819	4818	I	4816	4815	4814	4813	4812	4811	4810	4808	25.0
4.5	4581	4579	4578	4577	4													

TABLE 29 (cont.). Cols. 47-62, 110-113, 203-206.

Arg. 29.

TABLE 29 (cont.). Cols. 114-128, 188-202.

Arg. 29.

Arg.	47	48	49	50	v	51	52	53	54		Arg.	110	111	112	113	v	
	160	159	158	157		156	155	154	153	Succ.		97	96	95	94		Succ.
d										d	d						d
0.0	5847	5847	5847	5846	o	5846	5846	5846	5846	29.0	0.0	5843	5843	5843	5843	o	28.5
0.5	5823	5823	5823	5822	o	5822	5822	5822	5822	28.5	0.5	5809	5809	5809	5808	o	28.0
1.0	5766	5766	5766	5765	o	5765	5765	5764	5764	28.0	1.0	5743	5743	5742	5742	o	27.5
1.5	5678	5678	5677	5677	o	5676	5676	5675	5675	27.5	1.5	5646	5646	5644	5644	-I	27.0
2.0	5559	5559	5558	5557	-I	5557	5556	5555	5555	27.0	2.0	5517	5516	5516	5515	I	26.5
2.5	5411	5410	5409	5408	I	5408	5407	5406	5405	26.5	2.5	5360	5359	5358	5358	I	26.0
3.0	5235	5234	5233	5232	I	5231	5230	5229	5228	26.0	3.0	5176	5175	5174	5173	I	25.5
3.5	5033	5032	5031	5030	I	5028	5027	5026	5025	25.5	3.5	4966	4965	4964	4963	I	25.0
4.0	4807	4806	4805	4804	I	4803	4802	4800	4799	25.0	4.0	4734	4733	4732	4731	I	24.5
4.5	4561	4560	4558	4557	I	4556	4555	4554	4552	24.5	4.5	4482	4481	4480	4479	I	24.0
5.0	4297	4296	4294	4293	I	4292	4290	4289	4288	24.0	5.0	4213	4212	4211	4209	I	23.5
5.5	4018	4016	4015	4014	I	4012	4011	4009	4008	23.5	5.5	3930	3929	3928	3926	I	23.0
6.0	3727	3726	3724	3723	I	3721	3720	3718	3717	23.0	6.0	3637	3635	3634	3632	I	22.5
6.5	3428	3426	3425	3424	I	3422	3421	3419	3418	22.5	6.5	3336	3334	3333	3331	I	22.0
7.0	3124	3122	3121	3119	I	3118	3116	3115	3113	22.0	7.0	3031	3029	3028	3026	I	21.5
7.5	2818	2817	2815	2814	I	2812	2811	2809	2808	21.5	7.5	2725	2724	2722	2721	I	21.0
8.0	2515	2513	2512	2510	I	2509	2507	2506	2504	21.0	8.0	2423	2422	2420	2419	I	20.5
8.5	2217	2216	2214	2213	I	2211	2210	2208	2207	20.5	8.5	2122	2121	2119	2118	I	20.0
9.0	1928	1926	1925	1924	I	1922	1921	1920	1918	20.0	9.0	1842	1841	1840	1838	I	19.5
9.5	1652	1650	1649	1648	I	1646	1645	1644	1642	19.5	9.5	1570	1569	1568	1566	I	19.0
10.0	1391	1389	1388	1387	I	1386	1384	1383	1382	19.0	10.0	1315	1314	1312	1311	I	18.5
10.5	1148	1147	1146	1145	I	1144	1142	1141	1140	18.5	10.5	1078	1077	1076	1075	I	18.0
11.0	927	926	925	924	I	923	922	921	920	18.0	11.0	864	863	862	861	I	17.5
11.5	730	729	728	727	I	726	725	724	724	17.5	11.5	675	674	673	672	I	17.0
12.0	558	558	557	556	I	555	555	554	553	17.0	12.0	512	511	510	510	I	16.5
12.5	416	415	414	414	-I	413	413	412	411	16.5	12.5	378	377	377	376	-I	16.0
13.0	302	302	302	301	o	301	300	300	299	16.0	13.0	274	274	273	273	o	15.5
13.5	220	220	220	219	o	219	219	218	218	15.5	13.5	202	201	201	201	o	15.0
14.0	170	170	170	170	o	170	169	169	169	15.0	14.0	161	161	161	161	o	14.5
14.5	152	152	152	152	o	152	152	152	152	14.5	14.5	154	154	154	154	o	14.0
15.0	168	168	168	168	o	168	168	169	169	14.0	15.0	179	179	179	180	o	13.5
15.5	216	216	216	216	o	217	217	217	218	13.5	15.5	236	237	237	238	o	13.0
16.0	295	296	296	297	o	297	298	298	299	13.0	16.0	326	327	327	328	o	12.5
16.5	406	407	408	408	+I	409	410	410	411	12.5	16.5	446	447	448	448	+I	12.0
17.0	547	548	549	549	I	550	551	552	552	12.0	17.0	596	596	597	598	I	11.5
17.5	717	717	718	719	I	720	721	722	723	11.5	17.5	773	774	775	776	I	11.0
18.0	912	913	914	915	I	916	917	918	919	11.0	18.0	976	977	978	979	I	10.5
18.5	1131	1132	1134	1135	I	1136	1137	1138	1139	10.5	18.5	1203	1204	1205	1206	I	10.0
19.0	1372	1374	1375	1376	I	1377	1378	1380	1381	10.0	19.0	1450	1451	1452	1453	I	9.5
19.5	1632	1633	1635	1636	I	1637	1638	1640	1641	9.5	19.5	1714	1716	1717	1718	I	9.0
20.0	1907	1909	1910	1912	I	1913	1914	1916	1917	9.0	20.0	1994	1995	1997	1998	I	8.5
20.5	2196	2197	2198	2200	I	2201	2203	2204	2206	8.5	20.5	2285	2287	2288	2290	I	8.0
21.0	2493	2494	2496	2497	I	2499	2500	2502	2503	8.0	21.0	2585	2586	2588	2589	I	7.5
21.5	2796	2797	2799	2800	I	2802	2803	2805	2806	7.5	21.5	2889	2890	2892	2893	I	7.0
22.0	3102	3103	3104	3106	I	3107	3109	3110	3112	7.0	22.0	3194	3196	3197	3199	I	6.5
22.5	3406	3408	3409	3410	I	3412	3413	3415	3416	6.5	22.5	3498	3499	3501	3502	I	6.0
23.0	3706	3707	3708	3710	I	3711	3713	3714	3716	6.0	23.0	3795	3797	3798	3800	I	5.5
23.5	3997	3998	4000	4001	I	4002	4004	4005	4007	5.5	23.5	4084	4085	4086	4088	I	5.0
24.0	4277	4278	4280	4281	I	4282	4284	4285	4286	5.0	24.0	4360	4361	4362	4364	I	4.5
24.5	4542	4544	4545	4546	I	4547	4549	4550	4551	4.5	24.5	4620	4621	4622	4623	I	4.0
25.0	4790	4791	4792	4794	I	4795	4796	4797	4798	4.0	25.0	4861	4862	4864	4865	I	3.5
25.5	5017	5018	5019	5020	I	5021	5022	5023	5024	3.5	25.5	5082	5083	5084	5085	I	3.0
26.0	5221	5222	5223	5224	I	5224	5225	5226	5227	3.0	26.0	5278	5279	5280	5280	I	2.5
26.5	5399	5400	5401	5401	I	5402	5403	5404	5404	2.5	26.5	5448	5449	5449	5450	I	2.0
27.0	5549	5550	5551	5551	+I	5552	5553	5553	5554	2.0	27.0	5590	5590	5591	5591	+I	1.5
27.5	5671	5671	5672	5672	o	5673	5673	5674	5674	1.5	27.5	5702	5702	5702	5703	o	1.0
28.0	5761	5762	5762	5762	o	5763	5763	5763	5764	1.0	28.0	5782	5783	5783	5783	o	0.5
28.5	5820	5820	5820	5820	o	5821	5821	5821	5821	0.5	28.5	5831	5832	5832	5832	o	0.0
29.0	5846	5846	5846	5846	o	5846	5846	5846	5846	0.0							
Succ.	145	146	147	148		149	150	151	152		Succ.	1	2	3	4		
	62	61	60	59	v	58	57	56	55	Arg.		206	205	204	203	v	Arg.

Arg.	114	115	116	117	118	119	120	121	v	122	123	124	125	126	127	128	
	93	92	91	90	89	88	87	86		85	84	83	82	81	80	79	Succ.
d																	d
0.0	5842	5842	5842	5842	5842	5842	5842	5842	o	5842	5842	5842	5842	5841	5841	5841	28.5
0.5	5808	5808	5808	5807	5807	5807	5807	5806	o	5806	5806	5806	5805	5805	5805	5805	28.0
1.0	5741	5741	5741	5740	5740	5739	5739	5739	o	5738	5738	5737	5737	5737	5736	5736	27.5
1.5	5643	5643	5642	5642	5641	5640	5640	5639	-I	5639	5638	5638	5637	5637	5636	5636	27.0
2.0	5514	5514	5513	5512	5512	5511	5510	5510	I	5509	5508	5507	5507	5506	5505	5505	26.5
2.5	5357	5356	5355	5354	5353	5352	5351	5351	I	5350	5349	5348	5348	5347	5346	5345	26.0
3.0	5172	5171	5170	5169	5168	5167	5166	5165	I	5164	5163	5162	5161	5160	5159	5158	25.5
3.5	4962	4961	4960	4959	4958	4957	4956	4955	I	4954	4952	4951	4950	4949	4948	4947	25.0
4.0	4730	4729	4728	4726	4725	4724	4723	4722	I	4720	4719	4718	4717	4716	4714	4713	24.5
4.5	4477	4476	4475	4474	4472	4471	4470	4469	I	4467	4466	4465	4464	4462	4461	4460	24.0
5.0	4208	4207	4205	4204	4203	4201	4200	4199	I	4197	4196	4195	4193	4192	4191	4189	23.5
5.5	3925	3923	3922	3921	3919	3918	3916	3915	I	3914</							

TABLE 29 (cont.). Cols. 129-143, 173-187.

Arg. 29.

Arg.	129	130	131	132	133	134	135	136	v	137	138	139	140	141	142	143	Succ.
	78	77	76	75	74	73	72	71		70	69	68	67	66	65	64	
d																	d
0.0	5841	5841	5841	5841	5841	5841	5840	5840	o	5840	5840	5840	5840	5840	5840	5840	28.5
0.5	5804	5804	5804	5804	5803	5803	5803	5802	o	5802	5802	5802	5802	5801	5801	5801	28.0
1.0	5735	5735	5735	5734	5734	5733	5733	5732	o	5732	5732	5731	5731	5730	5730	5730	27.5
1.5	5635	5634	5634	5633	5633	5632	5632	5631	-I	5630	5630	5629	5629	5628	5628	5627	27.0
2.0	5504	5503	5502	5502	5501	5500	5500	5499	I	5498	5498	5497	5496	5495	5495	5494	26.5
2.5	5344	5343	5343	5342	5341	5340	5339	5338	I	5338	5337	5336	5335	5334	5333	5332	26.0
3.0	5158	5157	5156	5155	5154	5153	5152	5151	I	5150	5149	5148	5147	5146	5145	5144	25.5
3.5	4946	4945	4944	4943	4942	4940	4939	4938	I	4937	4936	4935	4934	4933	4932	4931	25.0
4.0	4712	4711	4710	4709	4707	4706	4705	4704	I	4703	4702	4700	4699	4698	4697	4696	24.5
4.5	4458	4457	4456	4455	4453	4452	4451	4450	I	4448	4447	4446	4444	4443	4442	4441	24.0
5.0	4188	4187	4185	4184	4183	4181	4180	4179	I	4177	4176	4174	4173	4172	4170	4169	23.5
5.5	3904	3902	3901	3900	3898	3897	3895	3894	I	3893	3891	3890	3888	3887	3886	3884	23.0
6.0	3609	3608	3606	3605	3604	3602	3601	3599	I	3598	3596	3595	3593	3592	3590	3589	22.5
6.5	3308	3306	3305	3303	3302	3300	3299	3297	I	3296	3294	3293	3292	3290	3289	3287	22.0
7.0	3003	3001	3000	2998	2997	2995	2994	2992	I	2991	2989	2988	2986	2985	2983	2982	21.5
7.5	2697	2696	2694	2693	2692	2690	2689	2687	I	2686	2684	2683	2681	2680	2678	2677	21.0
8.0	2396	2394	2393	2392	2390	2389	2387	2386	I	2384	2383	2382	2380	2379	2377	2376	20.5
8.5	2101	2100	2098	2097	2096	2094	2093	2091	I	2090	2089	2087	2086	2084	2083	2082	20.0
9.0	1817	1815	1814	1813	1811	1810	1809	1807	I	1806	1805	1803	1802	1801	1799	1798	19.5
9.5	1546	1545	1544	1542	1541	1540	1538	1537	I	1536	1535	1533	1532	1531	1530	1528	19.0
10.0	1292	1291	1290	1289	1288	1286	1285	1284	I	1283	1282	1280	1279	1278	1277	1276	18.5
10.5	1058	1057	1056	1055	1054	1052	1051	1050	I	1049	1048	1047	1046	1045	1044	1043	18.0
11.0	846	845	844	843	842	841	840	839	I	838	837	836	835	834	833	832	17.5
11.5	659	658	657	656	655	654	653	652	I	651	650	649	648	647	646	645	17.0
12.0	498	498	497	496	496	495	494	494	I	493	492	491	491	490	489	489	16.5
12.5	367	367	366	366	365	364	364	363	-I	363	362	362	361	360	360	359	16.0
13.0	266	266	265	265	264	264	263	263	o	263	262	262	261	261	260	260	15.5
13.5	196	196	196	196	195	195	195	194	o	194	194	194	193	193	193	193	15.0
14.0	159	159	159	159	159	159	158	158	o	158	158	158	158	158	158	158	14.5
14.5	155	155	155	155	155	155	155	155	o	155	155	155	155	155	155	155	14.0
15.0	183	183	183	184	184	184	184	184	o	185	185	185	186	186	186	186	13.5
15.5	243	244	244	244	245	245	246	246	o	246	247	247	248	248	249	249	13.0
16.0	336	336	337	337	338	338	339	340	+I	340	341	341	342	342	343	343	12.5
16.5	459	459	460	461	461	462	463	463	I	464	465	465	466	467	468	468	12.0
17.0	611	612	612	613	614	615	616	617	I	617	618	619	620	621	622	622	11.5
17.5	791	792	793	794	795	796	797	798	I	798	799	800	801	802	803	804	11.0
18.0	996	997	998	999	1000	1001	1002	1003	I	1004	1006	1007	1008	1009	1010	1011	10.5
18.5	1224	1226	1227	1228	1229	1230	1231	1232	I	1234	1235	1236	1237	1238	1239	1241	10.0
19.0	1473	1474	1476	1477	1478	1479	1481	1482	I	1483	1484	1486	1487	1488	1489	1491	9.5
19.5	1739	1741	1742	1743	1745	1746	1747	1749	I	1750	1751	1753	1754	1755	1757	1758	9.0
20.0	2020	2022	2023	2024	2026	2027	2028	2030	I	2031	2033	2034	2035	2037	2038	2040	8.5
20.5	2312	2314	2315	2317	2318	2320	2321	2322	I	2324	2325	2327	2328	2330	2331	2332	8.0
21.0	2612	2614	2615	2617	2618	2620	2621	2623	I	2624	2626	2627	2628	2630	2632	2633	7.5
21.5	2917	2918	2920	2921	2923	2924	2926	2927	I	2929	2930	2932	2933	2935	2936	2938	7.0
22.0	3222	3224	3225	3227	3228	3230	3231	3233	I	3234	3236	3237	3239	3240	3242	3243	6.5
22.5	3525	3527	3528	3530	3531	3533	3534	3536	I	3537	3538	3540	3541	3543	3544	3546	6.0
23.0	3822	3824	3825	3826	3828	3829	3831	3832	I	3834	3835	3836	3838	3839	3841	3842	5.5
23.5	4110	4111	4112	4114	4115	4116	4118	4119	I	4120	4122	4123	4124	4126	4127	4128	5.0
24.0	4384	4386	4387	4388	4389	4391	4392	4393	I	4394	4396	4397	4398	4400	4401	4402	4.5
24.5	4643	4644	4645	4646	4648	4649	4650	4651	I	4652	4654	4655	4656	4657	4658	4660	4.0
25.0	4882	4884	4885	4886	4887	4888	4889	4890	I	4891	4892	4894	4895	4896	4897	4898	3.5
25.5	5101	5102	5103	5104	5105	5106	5107	5108	I	5109	5110	5111	5112	5113	5114	5115	3.0
26.0	5295	5295	5296	5297	5298	5299	5300	5301	I	5302	5302	5303	5304	5305	5306	5307	2.5
26.5	5462	5463	5464	5464	5465	5466	5466	5467	I	5468	5469	5469	5470	5471	5472	5472	2.0
27.0	5601	5602	5602	5603	5604	5604	5605	5605	+I	5606	5607	5607	5608	5609	5610	5610	1.5
27.5	5710	5711	5711	5712	5712	5713	5713	5714	o	5714	5714	5715	5715	5716	5716	5717	1.0
28.0	5788	5789	5789	5789	5790	5790	5790	5790	o	5791	5791	5791	5792	5792	5792	5792	0.5
28.5	5834	5834	5834	5835	5835	5835	5835	5835	o	5835	5836	5836	5836	5836	5836	5836	0.0
Succ.	20	21	22	23	24	25	26	27		28	29	30	31	32	33	34	
	187	186	185	184	183	182	181	180	v	179	178	177	176	175	174	173	Arg.

TABLE 29 (concl.). Cols. 144-172.

Arg. 29.

Arg.	144	145	146	147	148	149	150	151	v	152	153	154	155	156	157	158	Succ.
	63	62	61	60	59	58	57	56		55	54	53	52	51	50	49	
d																	d
0.0	5840	5840	5839	5839	5839	5839	5839	5839	o	5839	5839	5838	5838	5838	5838	5838	28.5
0.5	5800	5800	5800	5800	5799	5799	5799	5799	o	5798	5798	5798	5798	5797	5797	5797	28.0
1.0	5729	5729	5728	5728	5728	5727	5727	5726	o	5726	5725	5725	5724	5724	5724	5723	27.5
1.5	5626	5626	5625	5625	5624	5624	5623	5622	-I	5622	5621	5621	5620	5620	5619	5618	27.0
2.0	5493	5493	5492	5491	5490	5490	5489	5488	I	5488	5487	5486	5486	5485	5484	5483	26.5
2.5	5332	5331	5330	5329	5328	5327	5326	5326	I	5325	5324	5323	5322	5321	5320	5320	26.0
3.0	5143	5142	5141	5140	5139	5138	5137	5136	I	5135	5134	5133	5132	5131	5130	5129	25.5
3.5	4930	4929	4928	4926	4925	4924	4923	4922	I	4921	4920	4919	4918	4917	4916	4914	25.0
4.0	4694	4693	4692	4691	4690	4688	4687	4686	I	4685	4684	4682	4681	4680	4679	4678	24.5
4.5	4439	4438	4437	4436	4434	4433	4432	4430	I	4429	4428	4426	4425	4424	4423	4421	24.0
5.0	4168	4166	4165	4164	4162	4161	4160										

TABLES OF THE MOON, SECT. I, CHAP. VI.

Example. The Moon's place at - 38I, Dec. 12, 6^h 56^m.

Date = - 400^s + 19^s 346^d 6^h 56^m = - 400 + 19^s 346^d 28 = - 400^s + 19^s 948 (Table I, II).
Computation of the Arguments: the tables are in Sect. II.

Tab.	Arg.	D	1	2	3	4	5	6	7	12	16	17	18	19
2	- 400	24 ^d 2436	+ 4 ^s 205	145 ^s 80	14 ^s 50	104 ^s 09	99 ^s 82	127 ^s 31	15 ^s 48	15 ^s 03	227 ^s 112	35 ^s 26	22 ^s 66	59 ^s 78
2	s.v.	12	1	4	3	6	7	3	3	0	65	0	1	3
3	1919	13 ^s 5322	140 ^s 602	109 ^s 20	34 ^s 15	49 ^s 94	52 ^s 28	92 ^s 02	29 ^s 16	20 ^s 65	176 ^s 402	8 ^s 18	32 ^s 80	34 ^s 78
4	346 ^d 2889	21 ^s 4524	125 ^s 396	105 ^s 80	11 ^s 66	57 ^s 91	88 ^s 11	74 ^s 91	98 ^s 98	13 ^s 26	198 ^s 001	44 ^s 59	25 ^s 20	6 ^s 49
3	- 2 Periods	- 59 ^s 0612	22 ^s 800	47 ^s 60	2 ^s 12	55 ^s 62	16 ^s 02	61 ^s 62	18 ^s 00	15 ^s 50	36 ^s 000	17 ^s 38	18 ^s 40	15 ^s 00
3	- Periods		- 282	- 312	- 248	- 256	- 264	- 100	- 48	- 502	- 102	- 76	- 76	
Sums		0 ^s 1838	11 ^s 004	96 ^s 36	62 ^s 46	19 ^s 50	0 ^s 16	91 ^s 83	61 ^s 65	16 ^s 44	135 ^s 450	3 ^s 41	23 ^s 05	40 ^s 08

Tab.	Arg.	23	24	25	26	27	28	29	30
2	- 400	8 ^d 0	158 ^s 7	22 ^s 5	20 ^s 5	20 ^s 5	3 ^d 0	27 ^s 5	21 ^s 5
2	s.v.	- 1 ^s 6	- 4	- 2 ^s 9	- 2 ^s 56	- 3 ^s 9	- 93 ^s 4	- 1 ^s 4	- 5 ^s 476
3	1919	10 ^s 0	20 ^s 0	22 ^s 5	12 ^s 0	0 ^s 0	3 ^s 0	14 ^s 0	17 ^s 5
4	346 ^d	7 ^s 0	19 ^s 5	12 ^s 5	18 ^s 0	32 ^s 0	0 ^s 0	24 ^s 0	15 ^s 0
3	0 ^d 28	346 ^s 1	96 ^s 5	109 ^s 2	82 ^s 04	149 ^s 1	102 ^s 8	119 ^s 6	190 ^s 667
3	- Per.	- 15 ^s 0	- 28 ^s 0	- 51 ^s 0	- 29 ^s 5	- 34 ^s 5	- 58 ^s 0	- 58 ^s 0	- 55 ^s 0
3	Adj.	+ 0 ^s 5	+ 1 ^s 0	+ 0 ^s 5	+ 1 ^s 0				
Sums		10 ^s 5	4 ^s 0	7 ^s 0	21 ^s 0	24 ^s 5	7 ^s 0	8 ^s 0	0 ^s 0

Tab.	Arg.	31	32	33	34	35	36	37
2	- 400	9 ^d 0	181 ^s 44	24 ^s 0	190 ^s 5	4 ^d 0	11 ^s 0	5 ^d 0
2	s.v.	- 7 ^s 2	+ 4 ^s 68	- 24	- 3 ^s 01	- 2 ^s 05	+ 1 ^s 6	+ 1 ^s 1
3	1919	9 ^s 5	32 ^s 78	28 ^s 0	133 ^s 5	2 ^s 5	4 ^s 0	9 ^s 0
4	346 ^d	6 ^s 0	25 ^s 5	21 ^s 0	140 ^s 0	9 ^s 5	11 ^s 5	3 ^s 0
3	0 ^d 28	169 ^s 87	193 ^s 56	56 ^s 62	8 ^s 09	160 ^s 04	67 ^s 6	228 ^s 8
3	- Per.	- 14 ^s 5	- 31 ^s 5	- 59 ^s 0	- 41 ^s 0	- 9 ^s 5	- 15 ^s 5	- 10 ^s 0
3	Adj.	+ 1 ^s 0	+ 0 ^s 5	+ 1 ^s 0				
Sums		11 ^s 0	23 ^s 5	14 ^s 5	53 ^s 0	7 ^s 0	11 ^s 5	7 ^s 0

Tab.	Arg.	38	39	40	41	42	43	44	45
2	- 400	1 ^d 5	24 ^s 7	6 ^d 0	144 ^s 0	18 ^s 5	2 ^d 0	0 ^d 5	3 ^d 0
2	s.v.	- 3 ^s 4	- 2 ^s 9	+ 1 ^s 04	+ 1 ^s 6	+ 2 ^s 5	- 1 ^s 0	- 2 ^s 2	+ 3 ^s 9
3	1919	6 ^s 5	11 ^s 7	4 ^s 0	69 ^s 5	17 ^s 5	8 ^s 5	1 ^s 0	5 ^s 0
4	346 ^d	11 ^s 0	8 ^s 0	19 ^s 0	172 ^s 5	23 ^s 0	8 ^s 5	6 ^s 0	2 ^s 5
3	0 ^d 28	172 ^s 8	17 ^s 9	179 ^s 69	12 ^s 1	87 ^s 8	100 ^s 2	103 ^s 4	70 ^s 8
3	- Per.	- 14 ^s 0	- 5 ^s 5	- 27 ^s 0	- 34 ^s 0	- 53 ^s 0	- 18 ^s 0	- 7 ^s 0	- 0 ^s 5
3	Adj.	- 152	+ 0 ^s 5	+ 1 ^s 0	- 26	- 230	+ 1 ^s 0	+ 1 ^s 0	+ 1 ^s 0
Sums		5 ^s 0	4 ^s 0	3 ^s 0	40 ^s 0	6 ^s 0	2 ^s 0	1 ^s 5	2 ^s 0

Tab.	Arg.	46	47	53	54	55	56	57	58
2	- 400	0 ^d 0	35 ^s 0	10 ^s 5	14 ^s 5	13 ^s 0	0 ^d 0	4 ^d 0	990 ^s 0
2	s.v.	- 39 ^s 7	+ 1 ^s 02	- 2 ^s 2	- 2	- 71	- 0 ^s 3	+ 0 ^s 5	+ 7
3	1919	4 ^s 0	88 ^s 5	22 ^s 0	3 ^s 5	20 ^s 0	5 ^s 0	14 ^s 0	277 ^s 6
4	346 ^d	10 ^s 5	346 ^s 0	27 ^s 0	19 ^s 5	23 ^s 0	1 ^s 5	9 ^s 5	346
3	0 ^d 28	39 ^s 3	14 ^s 44	32 ^s 5	27 ^s 2	75 ^s 11	46 ^s 2	64 ^s 7	3
3	- Per.	- 13 ^s 0	- 36 ^s 0	- 35 ^s 0	- 29 ^s 5	- 32 ^s 0	- 18 ^s 0	- 16 ^s 0	- 5
3	Adj.	+ 1 ^s 0	+ 0 ^s 5	+ 1 ^s 0	+ 0 ^s 5	+ 0 ^s 3	+ 1 ^s 0	+ 0 ^s 5	+ 1 ^s 0
Sums		1 ^s 5	10 ^s 0	25 ^s 5	8 ^s 5	24 ^s 0	7 ^s 5	12 ^s 0	161 ^s 4

Tab.	Arg.	59	60	61	62	71	72	73	74
2	- 400	7 ^d 1 ^s 0	2 ^d 5	9 ^s 0	9 ^s 0	21 ^s 5	27 ^s 0	4 ^d 0	8 ^d 0
2	s.v.	- 3 ^s 96	- 2 ^s 0	- 1 ^s 8	- 3	- 3 ^s 66	+ 1 ^s 52	- 2 ^s 0	- 2
3	1919	9 ^s 8 ^s 5	4 ^s 0	0 ^s 5	8 ^s 5	17 ^s 5	8 ^s 0	5 ^s 0	13 ^s 5
4	346 ^d	157 ^s 5	4 ^s 0	11 ^s 0	8 ^s 0	15 ^s 0	27 ^s 5	9 ^s 5	7 ^s 0
3	0 ^d 28	39 ^s 3	98 ^s 8	30 ^s 6	118	127 ^s 11	62 ^s 98	160 ^s 0	41 ^s 0
3	- Per.	- 188 ^s 0	+ 0 ^s 5	+ 0 ^s 5	- 19 ^s 0	- 55 ^s 0	- 31 ^s 5	- 9 ^s 5	- 15 ^s 0
3	Adj.	+ 1 ^s 0	- 17 ^s 1	- 53	+ 0 ^s 5	+ 1 ^s 0	+ 0 ^s 5	+ 0 ^s 5	+ 1 ^s 0
Sums		140 ^s 0	11 ^s 0	21 ^s 0	7 ^s 0	0 ^s 0	31 ^s 5	9 ^s 5	14 ^s 5

COMPUTATION OF AN ANCIENT ECLIPSE

Tab.	Arg.	76	77	82	83	84	L	-Σ
2	-400	1 ^d 5 0 ^c 7	5 ^d 0 4 ^c 4	2915	2813	2822	1046924 ^c	555686 ^c
3	s.v.	- 6	+ 2	0	+ 1	+ 1	64-	+ 66
2	1919	1 ^o 52 ³	1 ⁵ 6 ⁴	3745	549	5634	901420	390312
4	346 ^d	11 ^o 3	3 ^o 16 ^o	346	346	346	860520	65959
3	0 ^d 28	34 ^o 1	37 ^o 6				13703	55
3	- Per.	-7 ^o 15		-6800		-6800	-2592000	
3	Adj.	+0 ^o 5 -59	+0 ^o 5 -65					
Sums		7 ^o 15 ⁵	10 ^o - 0 ⁴	206	3709	2003	230503	1012078

For Tab. P 23 VI
 Date -380^o05 k = -0000248
 9 Per. 2438^o55 x -2280
 Arg. 2058^o5 = +0565

For Tab. P 24 VI
 Date -380^o05
 9 Per. 2314^o26
 Arg. 1934^o2

Computation of the Longitude, Latitude and Parallax.

III Tab.	Arg.	-0 ^d 5	Date 0 ^o 0	0 ^d 5
1	11 ^o 0	28 ^c	28 ^c	28 ^c
2	96	8	8	8
3	62	2	2	2
4	20	16	15	13
5	0	7	9	12
6	92	5	5	6
7	62	3	3	3
Sum		69	70	72
16	135 ^o 5	46	48	49
19	40	7	6	6
Sum		122	124	127
Int. fact., +.37			+1	
k x 1st sum			+4	
Σ ₁ = sum			129	
40	3 ^d 0	66 ^c	471	
41	40 ^o 0	5	62	
42	6 ^o 0	24	46	
43	2 ^o 0	37	52	
44	1 ^o 5	33	7	
45	2 ^o 0	33	12	
46	1 ^o 5	12	4	
47	105 ^o 0	0	514	
Σ ₁₀			52	
Σ ₂ { Sum		1349		
Tab. 47 x k		+29		

III Tab.	Arg. at date	Value
23	10 ^d 5 494 ^c	128 ^c
24	4 ^o 0 11	20
25	7 ^o 0 158	83
26	21 ^o 0 83	117
27	24 ^o 5 74	154
28	7 ^o 0 8	11
29	8 ^o 0 106	24
Sum		537
30	0 ^o 0 35 ^o 8 + 8	30307
31	11 ^o 0 12 ^o 9 + 1 ^o 3	2350
32	23 ^o 5 123 ^o 5 + 3 ^o 4	4446
33	14 ^o 5 42	133
34	53 ^o 0 0	210
35	7 ^o 0 110	199
36	11 ^o 5 61	29
37	7 ^o 0 377	38
38	5 ^o 0 210	15
39	4 ^o 0 21	2
L		230503
Σ ₂ { Sum		268769
k x 1st sum		+30
Σ ₂		1378
Longitude = sum		270177
,, Tab. 5, II		75 ^o 2 ^o 57 ^c

IV Tab.	Arg.	-0 ^d 5	Date 0 ^o 0	0 ^d 5
1	11 ^o 0	153 ^c	154 ^c	156 ^c
2	96 ^o 4	55	50	46
3	62	22	26	31
4	19 ^o 5	23	20	17
5	0	12	15	19
6	92	6	6	6
7	62	6	7	7
Sum		277	278	282
12	135 ^o 5	184	196	210
13	3 ^o 4	108	107	110
14	23	13	12	10
15	40 ^o 1	120	116	106
Sum		708	709	714
Int. fact., +.37			+ 1	
k x 1st sum			+16	
Σ ₂ = sum		726		
Σ ₂		268799		
P 34 ÷ 10		11		
P 35 (P 34 - 10 ^o)				
÷ 10		- 1		
19 + 9k		20		
-Σ		1012078		
S = sum		1281633		

IV Tab.	Arg.	-0 ^d 5	Date 0 ^o 0	0 ^d 5
34	11 ^o 0	10	9	8
35	96	35	35	35
36	62	15	13	13
37	20	5	5	5
38	0	1	1	1
43	135 ^o 5	92	90	90
Sum		158	153	152
Int. fact., +.37			- 1	
- Consts.			-129	
P 36 ÷ 10			- 14	
P 36 x P 37 ÷ 10			- 2	
Sum = C			+ 7	

VI Tab.	Arg.	Value
P 22 ÷ 100	206 ^d	15
P 23 ÷ 100	205875	11
P 24 ÷ 100	1934 ^o 2	1
24 + 9k		25
Σ ₁₀ = sum		52

IV Tab.	Arg. at date	Value
19	25 ^d 5 -0 ^c 1	188
20	8 ^o 5 23 ^o 6	79
21	24 ^o 0 118 ^o 2	5550
22	7 ^o 5 22 ^o 6	41
23	12 ^o 0 11 ^o 9	61
24	101 ^d 46	193
25	140 ^o 0 15 ^o 1	435
26	11 ^o 0 99 ^o 7	328
27	21 ^o 0 36 ^o 5	273
28	7 ^o 0 14 ^o 5	21
Sum		7160
- Consts.		- 6980
k (1st two lines - 340)		- 4
Σ ₂ = sum		+ 185
Tab. 33, Arg. S		+ 12875
Σ ₂ = sum		- 12690
Σ ₂ x C ÷ 10 ⁵		- 1
Latitude = sum		- 12691
,, Tab. 5, II		21 ^o 9 ^o 1

V Tab.	Arg.	-0 ^d 5	Date 0 ^o 0	0 ^d 5
1	11 ^o 0	24	26	30
2	96	288	295	302
3	62 ^o 5	252	260	265
4	20	50	50	51
5	0	32	34	35
6	92	13	14	14
7	62	5	6	6
Sum		664	685	703
10	135 ^o 5	77	80	80
11	3 ^o 4	8	8	8
12	23 ^o 1	2	2	2
13	40 ^o 1	26	24	23
Sum		777	799	816
Int. fact., +.37			+ 7	
k (1st sum - 595)			+ 5	
Σ ₂ = sum			811	

V Tab.	Arg. at date	Value
15	0 ^d 0 23 ^o 4 + 5	39735
16	14 ^o 5 41 ^o 9	5947
17	31 ^o 5 29 ^o 95 + 1 ^o 1	7407
18	9 ^o 5 56 ^o 1	619
19	14 ^o 5 36 ^o 8	386
21	7 ^o 0 15 ^o 5	58
22	10 ^o 0 - 0 ^o 4	121
Sum		54333
k (Tab. 19 - 200)		+ 10
9 (Const.)		9
Σ ₂		811
Σ ₂ = sum		55163
Tab. 24, Tab. Arg.		55163
Parallax		61 ^o 30 ^o 00

CHAPTER VII

TRANSFORMATION TO RIGHT ASCENSION AND DECLINATION

(TABLES T 50, T 51, T 52, SECT. VI.)

Let λ, β denote the longitude and latitude of the Moon, α, δ its right ascension and declination, and ω the obliquity of the ecliptic at date. We have

$$\begin{aligned}\sin \delta &= \sin \omega \sin \lambda \cos \beta + \cos \omega \sin \beta, \\ \cos \delta \sin \alpha &= \cos \omega \sin \lambda \cos \beta - \sin \omega \sin \beta, \\ \cos \delta \cos \alpha &= \cos \beta \cos \lambda.\end{aligned}$$

The first and second of these may be written

$$\begin{aligned}\sin \delta &= \sin \omega \cos \beta (\sin \lambda + \tan \beta \cot \omega), \\ \cos \delta \sin \alpha &= \cos \omega \cos \beta (\sin \lambda - \tan \beta \tan \omega).\end{aligned}$$

Put $\omega = \omega_0 + d\omega$ and $\omega_\beta = d\omega \sin 2\beta \operatorname{cosec} 2\omega_0$. Then if we neglect squares of $d\omega$ and ω_β , it is easy to show that

$$\sin \delta = \sin \omega \cos \beta \{ \sin \lambda + \tan (\beta - \omega_\beta) \cot \omega_0 \} \dots\dots\dots(1),$$

$$\sin \alpha = \cos \omega \cos \beta \{ \sin \lambda - \tan (\beta + \omega_\beta) \tan \omega_0 \} \sec \delta \dots\dots\dots(2)$$

which with $\cos \alpha = \cos \beta \cos \lambda \sec \delta \dots\dots\dots(3)$

constitute the three equations to be used.

Equation (1) furnishes δ . Equation (2) is used to find α when λ , and therefore approximately α , lies between 0° and 45° , 135° and 225° , or 315° and 360° . Equation (3) is used to find α when λ lies outside of these limits. The loss of accuracy which results from attempting to find an angle from its sine when the latter is near $+1$ or -1 is thus avoided.

In order to shorten the computations three tables are given in Sect. VI. Table T 50 gives ω_β with arguments $\beta, d\omega$; Table T 51 gives $\tan (\beta - \omega_\beta) \cot \omega_0$ with argument $\beta - \omega_\beta$; and Table T 52 gives $\tan (\beta + \omega_\beta) \tan \omega_0$ with argument $\beta + \omega_\beta$. The value $\omega_0 = 23^\circ 27' 0''$ has been chosen as convenient for the present century. Table T 50 has a range of $\pm 50''$ for $d\omega$; since the sign of ω_β is equal to the product of the signs of $d\omega, \beta$, this range makes the table available for about ± 80 years from 1918 which may be extended to ± 190 years by adding the line for $d\omega = 50''$ whenever $d\omega$ exceeds $50''$. For dates outside of these limits, the tables must be recomputed with another value of ω_0 .

The double-entry Table T 50 is so arranged that an easy interpolation for the argument β is alone necessary. In Tables T 51, T 52 practically the whole interpolation is performed by adding two numbers present in the tables.

For the transformation of a single place this method has no special advantages.

Precepts.

From Table T 50 find ω_β with the latitude as horizontal argument and the difference $d\omega$ between the obliquity at date and $23^\circ 27' 0''$ as vertical argument, disregarding signs; attach to ω_β the sign of the product of the signs of the arguments;

TRANSFORMATION TO RIGHT ASCENSION AND DECLINATION 109

ω_β is printed in units of $0''.01$. Interpolate for β between the numbers corresponding to the even seconds of $d\omega$ and add on, from the upper part of the table, the number corresponding to the nearest tenth of a second in the first decimal place of $d\omega$. Errors of two or three units in ω_β are unimportant.

From Table T 51 find the function, which is expressed in units of the seventh decimal place, with $\beta - \omega_\beta$ as argument, attaching to it the sign of $\beta - \omega_\beta$. The difference table permits of interpolation to hundredths of a second of arc of the argument without difficulty. Errors of two or three units in the function are unimportant. Add the natural sine of the longitude λ and take the logarithm of the sum. To this logarithm add $\log \cos \omega$, $\log \cos \beta$. The sum is $\log \sin \delta$, from which the declination δ is obtained.

From Table T 52 find the function which is expressed in units of the seventh decimal place, with $\beta + \omega_\beta$ as argument, attaching to it the sign opposite to that of the argument. This table is to be used only for dates when λ lies between 0° and 45° , or between 135° and 225° , or between 315° and 360° . The nearest unit in the function can be obtained from the difference table without difficulty. Add $\sin \lambda$ and take the logarithm of the sum. To this logarithm add $\log \cos \omega$, $\log \cos \beta$ and subtract $\log \cos \delta$. The sum is $\log \sin \alpha$ from which α , the right ascension, can be found.

When λ is not between the limits mentioned add $\log \cos \lambda$, $\log \cos \beta$ and subtract $\log \cos \delta$ to find $\log \cos \alpha$, from which α is found.

Gifford's *Table of Natural Sines* to every second of arc is convenient for finding $\sin \lambda$, and Shortrede's *Tables of Logarithmic Trigonometrical Functions* to every second of arc for obtaining δ in degree measure and α in time. Little extra labour is caused and accumulating errors are avoided by using λ , β to the computed degree of accuracy, namely, $0''.01$.

In the following examples, which are arranged in forms convenient for the ephemeris, the figures in italic type remain unchanged through the year; $d\omega$ changes slowly. The sign of $\sin \alpha$ is that of line 4, the sign of δ is that of line 5, and the quadrants in which α , λ lie are close enough to prevent confusion.

Examples.

1923, 6/10.		1923, 10/15.	
λ	191° 11' 4".98	λ	294° 30' 30".14
β	-1° 36' 27".87	β	4° 17' 35".93
$d\omega, \omega_\beta$ (Table T 50)	-12".23, -0".93	$d\omega, \omega_\beta$ (Table T 50)	-12".12, -2".49
1 Table T 51, Arg. $\beta - \omega_\beta$	+06471 61	1 Table T 51, Arg. $\beta - \omega_\beta$	+17309 71
2 $\sin \lambda$	-19397 27	2 $\sin \lambda$	-90990 07
3 Table T 52, Arg. $\beta + \omega_\beta$	-01217 31	5 sum	-73680 36
4 Sum of lines 2, 3	-20614 38	6 $\log \sin \omega$	9.59976 82
5 " " 1, 2	-12925 66	7 \log line 5	9.86735 17
6 $\log \sin \omega$	9.59976 76	8 $\log \cos \beta$	9.99877 95
7 \log line 5	9.11145 28	11 $\log \cos \lambda$	9.61786 61
8 $\log \cos \beta$	9.99982 00	12 $\log \cos \delta$	9.98059 36
9 $\log \cos \omega$	9.96257 35	14 $\log \cos \alpha = \text{sum of lines 8, 11 minus 12}$	9.63604 61
10 \log line 4	9.31417 45	15 $\log \sin \delta = \text{sum of lines 6, 7, 8}$	9.46589 05
12 $\log \cos \delta$	9.99942 53	α	19 ^h 42 ^m 31".23
13 $\log \sin \alpha = \text{sum of lines 8, 9, 10 minus 12}$	9.27715 17	δ	-16° 59' 54".8
15 $\log \sin \delta = \text{sum of lines 6, 7, 8}$	8.71104 94		
α	12 ^h 43 ^m 38".87		
δ	-2° 56' 48".8		

TABLES OF THE MOON. SECT. II.

TABLE I. Conversion of Calendar Dates.

Day	Date	Part of year	Min.	Part of day	Sec.	Part of day
<i>d</i>	<i>C B</i>	<i>y</i>		<i>d</i>		<i>d</i>
0	Jan. 0 1	0.000	1	0.00006044	1	0.0000116
10	10 11	0.027	2	0.0013889	2	0.0000231
20	20 21	0.055	3	0.00208333	3	0.0000347
30	30 31	0.082	4	0.0027778	4	0.0000463
40	Feb. 9 10	0.110	5	0.0034722	5	0.0000579
50	19 20	0.137	6	0.0041667	6	0.0000694
60	Mar. 1	0.164	7	0.0048611	7	0.0000810
70	11	0.192	8	0.0055556	8	0.0000926
80	21	0.219	9	0.0062500	9	0.0001042
90	31	0.246	10	0.0069444	10	0.0001157
100	April 10	0.274	11	0.0076389	11	0.0001273
110	20	0.301	12	0.0083333	12	0.0001389
120	30	0.329	13	0.0090278	13	0.0001505
130	May 10	0.356	14	0.0097222	14	0.0001620
140	20	0.383	15	0.0104167	15	0.0001736
150	30	0.411	16	0.0111111	16	0.0001852
160	June 9	0.438	17	0.0118056	17	0.0001968
170	19	0.465	18	0.0125000	18	0.0002083
180	29	0.493	19	0.0131944	19	0.0002199
190	July 9	0.520	20	0.0138889	20	0.0002315
200	19	0.548	21	0.0145833	21	0.0002431
210	29	0.575	22	0.0152778	22	0.0002546
220	Aug. 8	0.602	23	0.0159722	23	0.0002662
230	18	0.630	24	0.0166667	24	0.0002778
240	28	0.657	25	0.0173611	25	0.0002894
250	Sept. 7	0.684	26	0.0180556	26	0.0003009
260	17	0.712	27	0.0187500	27	0.0003125
270	27	0.739	28	0.0194444	28	0.0003241
280	Oct. 7	0.767	29	0.0201389	29	0.0003356
290	17	0.794	30	0.0208333	30	0.0003472
300	27	0.821	31	0.0215278	31	0.0003588
310	Nov. 6	0.849	32	0.0222222	32	0.0003704
320	16	0.876	33	0.0229167	33	0.0003819
330	26	0.904	34	0.0236111	34	0.0003935
340	Dec. 6	0.931	35	0.0243056	35	0.0004051
350	16	0.958	36	0.0250000	36	0.0004167
360	26	0.986	37	0.0256944	37	0.0004282
370	36	1.013	38	0.0263889	38	0.0004398
			39	0.0270833	39	0.0004514
			40	0.0277778	40	0.0004630
			41	0.0284722	41	0.0004745
			42	0.0291667	42	0.0004861
			43	0.0298611	43	0.0004977
			44	0.0305556	44	0.0005093
			45	0.0312500	45	0.0005208
			46	0.0319444	46	0.0005324
			47	0.0326389	47	0.0005440
			48	0.0333333	48	0.0005556
			49	0.0340278	49	0.0005671
			50	0.0347222	50	0.0005787
			51	0.0354167	51	0.0005903
			52	0.0361111	52	0.0006019
			53	0.0368056	53	0.0006134
			54	0.0375000	54	0.0006250
			55	0.0381944	55	0.0006366
			56	0.0388889	56	0.0006481
			57	0.0395833	57	0.0006597
			58	0.0402778	58	0.0006713
			59	0.0409722	59	0.0006829
			60	0.0416667	60	0.0006944

TABLE 2. Additions to the Arguments for the Centuries of the Julian and Gregorian Calendars.

Arg.	D	(a)	1 (a)	2 (a)	3 (a)	Arg.
Julian	<i>d</i>	<i>c</i>	<i>c</i>	<i>c</i>	<i>c</i>	Julian
-2000 B	5.1826 - 101	17.521 + 3	142.71 - 33	38.71 + 25	-2000	
-1900 B	0.8351 99	18.826 3	98.56 32	73.69 25	-1900	
-1800 B	26.0184 96	8.731 3	30.61 31	107.60 24	-1800	
-1700 B	21.6714 94	10.036 3	142.48 30	26.57 23	-1700	
-1600 B	17.3246 91	11.341 3	98.35 29	61.54 23	-1600	
-1500 B	12.9781 89	12.646 3	54.22 29	96.49 22	-1500	
-1400 B	8.6318 87	13.951 3	10.10 28	15.44 22	-1400	
-1300 B	4.2857 84	15.256 3	122.00 27	50.39 21	-1300	
-1200 B	29.4705 82	5.162 3	54.10 26	84.27 20	-1200	
-1100 B	25.1249 79	6.467 3	10.01 25	3.20 20	-1100	
-1000 B	20.7796 76	7.773 3	121.92 24	38.13 19	-1000	
-900 B	16.4346 74	9.078 3	77.85 23	73.05 18	-900	
-800 B	12.0898 72	10.383 3	33.79 23	107.96 18	-800	
-700 B	7.7452 69	11.689 3	145.73 22	26.87 17	-700	
-600 B	3.4009 67	12.994 3	101.68 21	61.77 17	-600	
-500 B	28.5874 64	2.899 3	33.84 20	95.61 16	-500	
-400 B	24.2436 61	4.205 3	145.80 19	14.50 15	-400	
-300 B	19.9001 59	5.510 3	101.78 18	49.38 15	-300	
-200 B	15.5568 57	6.815 3	57.77 18	84.26 14	-200	
-100 B	11.2137 54	8.120 3	13.76 17	3.13 13	-100	
0 B	6.8709 51	9.425 3	125.76 16	38.00 13	0	
+ 100 B	2.5284 48	10.730 3	81.77 15	72.85 12	+ 100	
200 B	27.7168 46	0.635 3	13.99 14	106.65 12	200	
300 B	23.3748 44	1.940 3	126.01 13	25.49 11	300	
400 B	19.0330 41	3.245 3	82.05 13	60.33 10	400	
500 B	14.6915 38	4.550 3	38.09 12	95.16 10	500	
600 B	10.3503 35	5.855 3	150.14 11	13.99 9	600	
700 B	6.0094 33	7.159 3	106.20 10	48.81 8	700	
800 B	1.6687 30	8.463 3	62.27 9	83.62 8	800	
900 B	26.8588 27	139.367 2	150.35 8	1.37 7	900	
1000 B	22.5187 25	140.671 2	106.63 7	36.17 6	1000	
1100 B	18.1788 22	0.975 2	62.73 7	70.96 6	1100	
1200 B	13.8392 19	2.279 2	18.83 6	105.75 5	1200	
1300 B	9.4998 16	3.583 1	130.94 5	24.53 4	1300	
1400 B	5.1607 14	4.886 1	87.06 4	59.30 4	1400	
1500 B	0.8219 - 11	6.189 + 1	43.19 - 3	94.06 + 3	1500	
Gregorian	1500	20.3525 - 11	135.789 + 1	19.39 - 3	93.00 + 3	1500
1600 B	16.0140 8	137.092 + 1	131.33 2	11.76 2	1600	
1700	10.6757 6	138.305 0	87.68 1	46.52 1	1700	
1800	5.3377 - 3	139.698 0	43.84 - 1	81.26 + 1	1800	
1900	0.0000 0	0.000 0	0.00 0	0.00 0	1900	
2000 B	25.1932 + 2	130.902 0	88.37 + 1	33.67 - 1	2000	
2100	19.8560 5	132.204 0	44.56 2	68.39 1	2100	
2200	14.5191 8	133.506 0	0.75 3	103.11 2	2200	
2300	9.1825 11	134.808 - 1	112.95 4	21.82 3	2300	
2400 B	4.8462 13	136.109 1	69.16 5	56.53 4	2400	
2500	29.0407 16	126.010 1	1.58 5	90.16 4	2500	
2600	23.7049 19	127.311 2	113.80 6	8.85 5	2600	
2700	18.3694 22	128.611 2	70.04 7	43.53 6	2700	
2800 B	14.0342 25	129.911 2	26.28 8	78.21 6	2800	
2900	8.6993 + 28	131.211 - 3	138.54 + 9	112.88 - 7	2900	

TABLE 2 (cont.). Additions to the Arguments for the Centuries of the Julian and Gregorian Calendars.

Arg.	4 (a)	5 (a)	6 (a)	7 (a)	8 (a)	9 (a)	10 (a)	11 (a)	12 (a)	Arg.
Julian	c	c	c	c	c	c	c	c	c	Julian
-2000	87:46 -52	58:48 -54	5:16 -28	45:80 +22	24:80 -32	10:30 -27	73:95 +6	29:74 +3	17:16 -3	-2000
-1900	16:12 51	110:46 53	101:02 27	76:88 21	31:41 31	15:17 26	56:72 6	19:44 3	4:97 3	-1900
-1800	40:08 50	26:45 52	34:07 26	98:96 21	23:24 30	14:32 26	19:38 6	5:21 3	9:04 3	-1800
-1700	93:67 49	78:47 51	129:95 25	30:03 20	29:87 29	19:12 25	2:14 6	38:91 3	20:85 3	-1700
-1600	22:36 47	2:49 49	93:83 25	61:09 20	36:51 29	23:92 24	64:90 6	28:62 3	8:67 3	-1600
-1500	75:07 46	54:53 48	57:71 24	92:15 19	43:16 28	28:73 24	47:66 6	18:32 3	20:49 3	-1500
-1400	3:79 45	106:58 47	21:61 23	23:21 19	49:82 27	33:54 23	30:41 5	8:02 3	8:30 3	-1400
-1300	56:52 43	30:65 45	117:51 23	54:26 18	6:48 26	38:36 22	13:17 5	41:72 3	20:12 3	-1300
-1200	81:46 42	74:72 44	50:61 22	76:31 18	48:36 26	37:55 22	55:82 5	27:48 3	0:19 3	-1200
-1100	10:22 41	126:81 43	14:52 21	7:35 17	5:04 25	0:38 21	38:58 5	17:18 3	12:01 2	-1100
-1000	62:90 40	50:91 41	110:44 21	38:38 16	11:73 24	5:22 20	21:33 5	6:88 2	23:83 2	-1000
-900	115:78 38	103:03 40	74:37 20	69:41 16	18:42 23	10:06 20	4:08 5	40:58 2	11:66 2	-900
-800	44:58 37	27:17 39	38:31 19	0:43 15	25:12 22	14:92 19	66:82 5	30:27 2	23:48 2	-800
-700	97:39 36	79:31 37	2:25 19	31:45 15	31:83 22	19:78 18	49:57 4	19:97 2	11:30 2	-700
-600	26:21 34	3:47 36	98:20 18	62:47 14	38:55 21	24:65 18	32:32 4	0:66 2	23:13 2	-600
-500	51:24 33	47:63 35	31:35 17	84:48 14	30:48 20	23:88 17	74:96 4	39:42 2	3:20 2	-500
-400	104:99 32	99:82 33	127:31 16	15:48 13	37:22 19	28:76 16	57:70 4	29:11 2	15:03 2	-400
-300	32:96 30	24:02 32	91:28 16	49:48 13	43:96 18	33:65 16	40:44 4	18:80 2	2:85 2	-300
-200	85:84 29	76:23 30	55:26 15	77:47 12	0:71 18	38:54 15	33:18 4	8:50 2	14:68 2	-200
-100	14:73 28	0:46 29	19:24 14	8:46 12	7:47 17	1:44 14	5:92 3	42:19 2	2:51 2	-100
0	67:63 26	52:70 28	115:23 14	39:44 11	14:24 16	6:35 14	68:65 3	31:88 2	14:34 2	0
+ 100	120:55 25	104:96 26	70:23 13	70:42 11	21:01 15	11:26 13	51:38 3	21:56 2	2:17 2	+ 100
200	21:68 24	21:22 25	12:43 12	92:39 10	13:00 14	10:54 12	14:02 3	7:31 1	6:25 1	200
300	74:62 22	73:50 23	108:44 12	23:35 9	19:79 14	15:47 12	76:75 3	41:00 1	18:08 1	300
400	3:58 21	125:80 22	72:46 11	54:31 9	26:59 13	20:40 11	59:48 3	30:69 1	5:91 1	400
500	56:55 20	50:11 21	36:49 10	85:26 8	33:40 12	25:34 10	42:20 2	20:37 1	17:75 1	500
600	109:54 18	102:44 19	0:52 9	16:21 8	40:22 11	30:29 9	24:93 2	12:06 1	5:58 1	600
700	38:54 17	26:78 18	96:56 9	47:15 7	47:04 10	35:25 9	7:65 2	43:74 1	17:42 1	700
800	91:55 15	79:14 16	60:61 8	78:09 7	3:87 9	40:21 8	70:37 2	33:42 1	5:25 1	800
900	116:77 14	123:50 15	125:86 7	0:02 6	45:91 9	39:54 7	32:99 2	19:17 1	9:34 1	900
1000	45:81 13	47:88 13	89:92 7	30:95 5	2:76 8	2:52 7	15:71 2	8:85 1	21:18 1	1000
1100	98:86 11	100:28 12	53:99 6	61:87 5	9:62 7	7:50 6	78:43 1	42:53 1	9:01 1	1100
1200	27:93 10	24:70 10	18:07 5	92:78 4	16:49 6	12:49 5	61:14 1	32:21 1	20:85 1	1200
1300	81:01 8	77:13 9	114:15 4	23:68 4	23:37 5	17:49 4	43:86 1	21:89 +1	8:69 -1	1300
1400	10:11 7	1:57 7	78:24 4	54:58 3	30:25 4	22:50 4	26:57 1	11:56 0	20:53 0	1400
1500	63:22 -6	54:03 -6	42:34 -3	85:48 +2	37:14 -3	27:51 -3	9:28 +1	1:24 0	8:38 0	1500
Gregorian										Gregorian
1500	35:41 -6	46:02 -6	11:53 -3	76:48 +2	22:34 -3	21:87 -3	69:18 +1	41:30 0	0:62 0	1500
1600	88:54 -4	98:49 5	107:64 2	7:37 2	29:24 3	26:80 2	51:89 +1	30:98 0	12:47 0	1600
1700	17:68 3	22:98 3	71:75 1	38:25 1	36:15 2	31:92 1	34:59 0	26:65 0	0:31 0	1700
1800	70:83 -1	75:48 -2	35:87 -1	69:13 +1	43:07 -1	36:96 -1	17:30 0	10:33 0	12:16 0	1800
1900	0:00 0	0:00 0	0:00 0	0:00 0	0:00 0	0:00 0	0:00 0	0:00 0	0:00 0	1900
2000	25:37 +1	44:52 +2	65:32 +1	21:87 -1	42:14 +1	41:41 +1	42:60 0	29:73 0	4:10 0	2000
2100	78:57 3	97:07 3	29:47 1	52:73 1	49:08 2	4:47 1	25:30 0	19:40 0	15:94 0	2100
2200	7:78 4	21:64 5	123:62 2	83:58 2	6:03 3	9:53 2	8:00 -1	9:08 0	3:79 0	2200
2300	61:00 6	74:22 6	89:77 3	14:42 2	13:00 3	14:60 3	70:69 1	42:75 0	15:64 0	2300
2400	114:24 7	126:81 8	53:94 4	45:26 3	19:97 4	19:68 4	53:38 1	32:41 0	3:49 0	2400
2500	15:60 9	43:41 9	119:30 4	67:10 4	12:15 5	19:13 4	15:98 1	13:14 -1	7:59 +1	2500
2600	68:96 10	96:04 11	83:48 5	97:92 4	19:13 6	24:23 5	78:67 1	7:81 1	19:44 1	2600
2700	122:24 12	20:68 12	47:67 6	28:74 5	26:13 7	29:33 6	61:36 1	41:48 1	7:29 1	2700
2800	51:54 13	73:33 14	11:86 7	59:50 6	33:14 8	34:44 7	44:04 2	31:14 1	19:14 1	2800
2900	104:85 +15	126:01 +15	108:06 +7	90:36 -6	40:15 +9	39:50 +8	26:72 -2	20:81 -1	7:00 +1	2900

TABLES OF THE MOON. SECT. II.

TABLE 2 (cont.). Additions to the Arguments for the Centuries of the Julian and Gregorian Calendars.

Arg.	13 (a)	14 (a)	15 (a)	16 (a)	17 (a)	18 (a)	19 (a)	20 (a)	21 (a)	22 (a)	Arg.
Julian	<i>c</i>	<i>c</i>	<i>c</i>	<i>c</i>	<i>c</i>	<i>c</i>	<i>c</i>	<i>c</i>	<i>c</i>	<i>c</i>	Julian
-2000	5:89 +13	14:93 -4	24:79 +8	198:428 -532	40:81 +4	22:45 -5	0:73 +22	35:84 -33	12:27 +28	6:18 -20	-2000
-1900	9:27 12	30:09 4	26:42 8	125:061 519	29:35 4	2:80 5	5:87 21	53:76 32	32:42 27	2:53 20	-1900
-1800	4:75 12	8:09 4	27:55 8	33:707 507	9:20 4	11:96 5	3:50 21	42:20 31	51:06 27	21:00 19	-1800
-1700	8:13 12	23:25 4	1:18 7	211:366 494	48:73 4	30:31 5	8:63 20	60:14 30	15:20 26	17:35 19	-1700
-1600	11:50 12	6:41 4	2:81 7	138:037 481	37:27 4	10:67 5	13:75 20	78:09 29	35:33 25	13:70 18	-1600
-1500	14:87 11	21:57 4	4:44 7	64:722 468	25:81 3	29:03 5	18:86 19	2:05 29	55:46 25	10:06 18	-1500
-1400	18:23 11	4:74 4	6:06 7	242:419 455	14:34 3	9:39 4	23:97 19	20:01 28	19:58 24	6:43 17	-1400
-1300	21:60 11	19:90 4	7:68 7	169:129 442	2:88 3	27:75 4	29:08 18	37:98 27	39:69 23	2:80 17	-1300
-1200	17:06 10	29:91 4	8:80 6	77:852 429	33:72 3	36:91 4	26:68 18	26:46 26	2:29 23	21:30 16	-1200
-1100	20:42 10	13:08 3	10:42 6	4:580 416	22:25 3	17:28 4	31:77 17	44:45 26	22:39 22	17:68 16	-1100
-1000	23:77 10	28:25 3	12:04 6	182:338 493	10:78 3	35:64 4	36:86 17	62:45 25	42:48 21	14:07 15	-1000
-900	27:12 9	11:42 3	13:05 6	109:100 390	50:31 3	16:01 4	41:95 16	80:46 24	6:57 21	10:46 15	-900
-800	30:46 9	26:59 3	15:26 6	35:876 377	38:84 3	34:37 4	47:03 16	4:47 23	26:65 20	6:86 14	-800
-700	33:81 9	9:76 3	16:87 5	213:665 393	27:37 3	14:74 3	52:10 15	22:49 22	46:72 19	3:25 14	-700
-600	37:15 8	24:94 3	18:48 5	140:467 350	15:00 3	33:11 3	57:17 14	40:52 21	10:78 18	35:66 13	-600
-500	32:59 8	2:95 3	19:59 5	49:283 337	46:74 2	4:29 3	54:73 14	29:06 21	29:33 18	18:20 13	-500
-400	35:92 8	18:13 3	21:19 5	227:112 323	35:26 2	22:66 3	59:78 13	47:10 20	49:38 17	14:61 12	-400
-300	39:28 8	1:30 3	22:79 5	153:955 310	23:79 2	3:03 3	64:83 13	65:16 19	13:42 16	11:03 12	-300
-200	42:58 7	16:48 2	24:39 4	80:811 296	12:31 2	21:41 3	69:88 12	83:22 18	33:46 16	7:46 11	-200
-100	1:91 7	31:66 2	25:99 4	7:680 283	0:83 2	1:78 3	74:92 12	7:29 17	53:49 15	3:89 11	-100
0	5:23 7	14:84 2	27:58 4	185:563 260	40:36 2	20:16 3	3:95 11	25:37 16	17:51 14	0:33 10	0
+100	8:55 6	30:02 2	1:18 4	112:460 255	28:88 2	0:54 2	8:98 11	43:46 16	37:53 13	32:77 10	+100
200	3:06 6	8:04 2	2:27 4	21:371 242	8:71 2	9:72 2	0:30 10	32:05 15	0:02 13	15:34 9	200
300	7:27 6	23:23 2	3:86 3	199:295 228	48:22 2	28:10 2	11:52 9	50:16 14	20:02 12	11:79 9	300
400	10:58 5	6:41 2	5:45 3	126:233 214	36:74 2	8:49 2	16:53 9	68:27 13	40:01 11	8:25 8	400
500	13:89 5	21:00 2	7:03 3	53:185 200	25:26 1	26:87 2	21:54 8	86:39 12	4:00 11	4:71 8	500
600	17:19 5	4:78 2	8:61 3	231:151 186	13:77 1	7:26 2	26:54 8	10:52 11	23:98 10	1:18 7	600
700	20:49 4	19:97 1	10:19 3	158:131 172	2:29 1	25:65 2	31:53 7	28:66 11	43:95 9	33:66 6	700
800	23:78 4	3:16 1	11:77 2	85:125 158	41:80 1	6:03 2	36:52 7	46:81 10	7:92 8	30:14 6	800
900	19:18 4	13:19 1	12:85 2	245:133 144	21:62 1	15:22 1	34:00 6	35:46 9	26:36 8	12:74 5	900
1000	22:46 3	28:38 1	14:43 2	172:156 130	10:14 1	33:62 1	38:98 5	53:63 8	46:31 7	9:23 5	1000
1100	25:75 3	11:57 1	16:00 2	99:192 116	49:65 1	14:01 1	43:95 5	17:03 7	10:25 6	5:72 4	1100
1200	29:03 2	26:77 1	17:57 2	26:243 101	38:16 1	32:40 1	48:01 4	89:98 6	30:19 5	2:22 4	1200
1300	32:31 2	9:96 1	19:14 1	204:308 87	26:66 1	12:80 1	53:87 4	14:17 5	50:11 5	34:73 3	1300
1400	35:58 2	25:16 -1	20:70 1	131:387 73	15:17 +1	31:19 1	58:82 3	32:37 4	14:03 4	31:24 3	1400
1500	38:85 +1	8:36 0	22:27 +1	58:480 -58	3:68 0	11:59 -1	63:77 +2	50:58 -4	33:94 +3	27:76 -2	1500
Gregorian											Gregorian
1500	30:95 +1	3:20 0	21:77 +1	40:480 -58	45:99 0	2:39 -1	56:27 +2	21:08 -4	32:43 +3	13:88 -2	1500
1600	34:22 1	18:40 0	23:33 +1	218:588 44	34:49 0	20:79 0	61:21 2	39:39 3	52:34 2	10:40 2	1600
1700	37:48 +1	1:60 0	24:89 0	145:711 29	23:00 0	1:10 0	66:15 1	57:53 2	16:23 2	6:93 1	1700
1800	40:74 0	16:80 0	26:44 0	72:848 -15	11:50 0	19:60 0	71:08 +1	75:76 -1	36:12 +1	3:46 -1	1800
1900	0:00 0	0:00 0	0:00 0	0:000 0	0:00 0	0:00 0	0:00 0	0:00 0	0:00 0	0:00 0	1900
2000	39:35 0	10:04 0	1:05 0	160:166 +15	30:81 0	9:21 0	73:42 -1	82:75 +1	18:36 -1	18:66 +1	2000
2100	42:60 -1	25:25 0	2:60 0	87:347 29	19:31 0	27:61 0	2:33 1	7:01 2	38:23 2	15:21 1	2100
2200	1:85 1	8:45 0	4:15 -1	14:543 44	7:81 0	8:02 0	7:23 2	25:28 3	2:08 2	11:77 2	2200
2300	5:09 1	23:66 0	5:70 1	192:754 59	47:31 0	26:43 +1	12:13 2	43:56 4	21:93 3	8:33 2	2300
2400	8:33 2	6:87 +1	7:24 1	119:980 74	35:80 -1	6:84 1	17:02 3	61:85 5	41:77 4	4:90 3	2400
2500	3:67 2	16:92 1	8:29 1	29:220 89	15:61 1	16:05 1	14:41 4	50:05 5	4:10 5	23:59 3	2500
2600	6:90 3	0:13 1	9:83 2	207:475 104	4:10 1	34:47 1	19:29 4	68:96 0	23:92 5	20:17 4	2600
2700	10:12 3	15:34 1	11:36 2	134:746 119	43:59 1	14:88 1	24:16 5	87:27 7	43:74 6	16:75 4	2700
2800	13:35 3	30:56 1	12:90 2	62:031 134	32:09 1	33:30 1	29:03 6	11:60 8	7:55 7	13:34 5	2800
2900	16:57 -4	13:77 +1	14:43 -2	240:332 +149	20:58 -1	13:72 +1	33:89 -6	29:94 +9	27:35 -8	9:93 +6	2900

TABLE 2 (cont.). Additions to the Arguments for the Centuries of the Julian and Gregorian Calendars.

Arg.	23 (a)		24 (a)		25 (a)		26 (a)		27 (a)		28 (a)		Arg.						
Julian	d	c	d	c	d	c	d	c	d	c	d	c	Julian						
-2000	3.0	323.8	-124	6.5	149.0	-33	3.0	0.0	-242	25.0	11.22	-2098	8.0	77.8	+326	1.5	138.0	-111	-2000
-1900	14.0	201.0	121	2.5	76.8	32	17.0	8.3	236	11.5	58.22	2049	13.5	86.0	318	4.0	155.3	108	-1900
-1800	9.5	213.5	119	12.5	68.6	31	5.0	160.3	230	28.0	49.71	2000	19.0	93.3	310	6.5	172.9	106	-1800
-1700	5.0	226.2	116	8.0	163.6	30	19.0	169.8	224	14.5	97.09	1951	24.5	99.9	302	9.5	12.8	103	-1700
-1600	0.5	239.2	113	4.0	91.7	29	7.5	133.9	218	1.5	4.16	1902	30.0	105.6	294	2.0	75.9	100	-1600
-1500	11.5	117.5	111	0.0	19.8	29	21.5	144.6	212	17.5	139.13	1852	0.5	189.5	286	4.5	94.3	98	-1500
-1400	7.0	131.0	108	10.0	12.0	28	10.0	110.0	206	4.5	40.58	1802	6.0	193.6	278	7.0	112.9	95	-1400
-1300	2.5	144.7	106	5.5	107.3	27	24.0	121.9	200	21.0	40.53	1752	11.5	196.9	269	9.5	131.9	92	-1300
-1200	13.5	23.7	103	1.5	35.7	26	12.5	88.4	194	7.5	90.99	1702	17.0	199.3	261	2.5	18.1	90	-1200
-1100	9.0	38.0	100	11.5	28.1	25	1.0	55.5	188	24.0	85.95	1653	22.5	200.9	253	5.0	37.5	87	-1100
-1000	4.5	52.6	97	7.0	123.7	24	15.0	69.2	182	10.5	137.41	1594	28.0	201.7	245	7.5	57.2	84	-1000
-900	0.0	67.4	94	3.0	52.3	24	3.5	37.5	176	27.0	133.46	1555	33.5	201.6	237	0.0	122.2	82	-900
-800	10.5	54.6	91	13.0	45.0	23	17.5	52.4	170	14.0	43.89	1495	4.5	21.8	229	2.5	142.5	79	-800
-700	6.0	562.0	87	8.5	140.8	22	6.0	21.9	164	0.5	96.91	1443	10.0	20.1	221	5.0	163.1	76	-700
-600	1.5	578.0	84	4.5	69.7	21	20.0	38.1	158	17.0	94.47	1300	15.5	17.7	213	8.0	5.9	73	-600
-500	12.5	459.2	81	0.0	165.7	20	8.5	8.8	152	4.0	6.54	1337	21.0	14.5	205	0.5	72.0	71	-500
-400	8.0	475.7	78	10.0	158.7	19	22.5	26.1	146	20.5	5.15	1284	26.5	10.4	197	3.0	93.4	68	-400
-300	3.5	492.5	74	6.0	87.8	19	10.5	187.1	140	7.0	60.30	1230	32.0	5.6	188	5.5	115.0	65	-300
-200	14.5	374.7	71	2.0	17.1	18	25.0	16.7	133	23.5	59.98	1176	2.5	78.9	180	8.0	137.0	62	-200
-100	10.0	392.3	68	12.0	10.4	17	13.0	178.9	127	10.0	116.20	1122	8.0	72.4	172	1.0	26.2	59	-100
0	5.5	410.1	65	7.5	106.7	16	1.5	152.7	121	26.5	116.95	1069	13.5	65.1	163	3.5	48.7	56	0
+100	1.0	428.2	62	3.5	36.2	15	15.5	173.1	115	13.5	32.24	1016	19.0	20.1	221	6.0	71.5	54	+100
200	12.0	311.7	59	13.5	29.8	14	4.0	148.2	109	0.0	99.06	962	24.5	47.9	149	8.5	94.6	51	200
300	7.5	330.4	56	9.0	126.4	13	18.0	169.9	102	16.5	92.42	908	30.0	38.0	137	1.0	163.0	45	300
400	3.0	349.4	53	5.0	56.1	13	6.5	146.2	96	3.5	9.31	854	0.5	106.3	128	4.0	8.6	45	400
500	14.0	233.7	50	0.5	152.9	12	20.5	109.1	90	20.0	12.75	799	6.0	94.6	120	6.5	32.6	42	500
600	9.5	253.3	47	10.5	146.8	11	9.0	146.6	84	6.5	72.74	744	11.5	82.1	111	9.0	56.8	39	600
700	5.0	273.2	44	6.5	76.8	10	23.0	170.8	77	23.0	77.27	688	17.0	68.7	103	1.5	120.3	36	700
800	0.5	293.4	40	2.5	6.8	9	11.5	149.7	71	9.5	138.35	632	22.5	54.4	94	4.0	151.2	33	800
900	11.5	179.0	37	12.5	1.0	8	0.0	129.1	65	26.5	2.00	575	28.0	39.3	86	6.5	170.3	30	900
1000	7.0	199.9	33	8.0	98.2	8	14.0	155.2	58	13.0	64.21	518	33.5	23.4	77	9.5	23.7	27	1000
1100	2.5	221.2	29	4.0	28.5	7	3.5	135.9	52	29.5	70.99	461	4.0	85.6	69	2.0	94.4	24	1100
1200	13.5	107.9	25	14.0	22.9	6	16.5	163.3	45	16.0	134.34	494	9.5	68.0	61	4.5	120.4	21	1200
1300	9.0	129.9	22	9.5	120.4	5	5.0	145.3	39	3.0	56.27	347	15.0	49.6	52	7.0	146.7	18	1300
1400	4.5	152.4	18	5.5	50.9	4	10.0	174.0	32	19.5	64.78	289	20.5	30.3	44	0.0	40.4	15	1400
1500	0.0	175.2	-15	1.0	148.6	-3	7.5	157.3	-26	6.0	129.87	-232	26.0	10.2	+35	2.5	67.3	-12	1500
Gregorian																			Gregorian
1500	5.5	40.2	-15	5.5	45.6	-3	23.5	14.3	-26	26.0	73.87	-232	16.0	10.2	+35	2.5	22.3	-12	1500
1600	1.0	63.3	11	1.0	143.3	3	11.5	187.2	20	12.5	139.53	175	21.0	247.2	26	5.0	49.5	9	1600
1700	10.5	559.9	7	10.0	138.1	2	25.0	28.8	13	28.5	7.77	117	25.5	225.3	18	6.5	77.0	6	1700
1800	5.0	574.8	-4	5.0	69.0	-1	12.5	14.1	-7	14.0	74.60	-58	30.0	202.6	+9	8.0	104.9	-3	1800
1900	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.00	0	0.0	0.0	0	0.0	0.0	0	1900
2000	10.5	488.6	+3	9.5	162.1	+1	14.0	32.6	+7	16.5	11.98	+59	5.0	233.5	-9	2.5	28.4	+3	2000
2100	5.0	513.4	7	4.5	93.2	2	1.5	19.8	13	2.0	80.35	118	9.5	208.0	18	4.0	57.2	6	2100
2200	15.0	403.6	10	13.5	88.5	3	14.5	53.6	20	17.5	93.70	176	14.0	181.7	27	5.5	86.3	9	2200
2300	9.5	429.2	13	8.5	19.8	3	2.0	42.2	26	3.5	21.43	235	18.5	154.5	37	7.0	115.7	12	2300
2400	5.0	455.1	17	4.0	118.2	4	16.0	77.4	33	20.0	35.76	294	24.0	126.3	46	0.0	12.4	16	2400
2500	15.0	346.3	21	13.0	113.7	5	3.5	67.2	40	5.5	100.67	354	28.5	97.2	55	1.5	42.4	19	2500
2600	9.5	372.9	25	8.0	45.3	6	16.5	103.7	46	21.0	122.19	415	33.0	67.2	64	3.0	72.7	22	2600
2700	4.0	399.9	28	2.5	143.9	7	4.0	94.9	53	7.0	52.32	476	2.5	115.4	73	4.5	103.3	25	2700
2800	15.0	292.3	32	12.5	139.6	8	18.0	132.8	60	23.5	69.05	537	8.0	83.0	81	7.0	134.3	28	2800
2900	9.5	320.1	+36	7.5	71.5	+8	5.5	125.3	+66	9.5	0.40	+598	12.5	51.0	-90	8.5	165.6	+32	2900

TABLE 2 (cont.). Additions to the Arguments for the Centuries of the Julian and Gregorian Calendars.

Arg.	29		(a)		30		(a) (b)		31		(a)		32		(a)		33		(a)		34		(a)		Arg.
Julian	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	Julian		
-2000	14.5	185.6 + 217	26.5	307.328	-45178	-82	5.0	107.25	-500	11.5	231.42 + 3856	5.0	35.75 - 197	124.5	9.05 - 2474										-2000
-1900	19.0	176.0 212	14.5	42.367	44102	81	0.5	196.95	576	16.5	198.68 3765	0.5	65.65 192	0.0	3.15 2416										-1900
-1800	23.5	165.9 207	2.0	108.283	43023	80	11.0	148.79	503	21.5	165.03 3672	26.0	3.60 188	81.0	8.83 2357										-1800
-1700	28.0	155.3 202	17.0	211.380	41941	78	6.5	238.76	549	26.5	130.45 3578	21.5	33.59 183	162.5	1.10 2298										-1700
-1600	3.5	35.2 197	4.5	279.560	40856	76	2.5	34.87	536	31.5	94.92 3483	17.0	63.63 179	37.5	10.97 2239										-1600
-1500	8.0	23.6 192	20.0	54.827	39768	74	12.5	281.11	522	4.5	184.45 3387	12.5	93.71 175	119.0	4.42 2179										-1500
-1400	12.5	11.5 187	7.5	125.184	38675	72	8.5	77.49	509	9.5	147.02 3292	8.5	25.83 170	200.0	12.47 2118										-1400
-1300	16.5	205.8 182	22.5	232.636	37578	69	4.0	168.00	496	14.5	108.64 3196	4.0	56.00 166	75.5	10.13 2057										-1300
-1200	21.0	192.7 176	10.0	305.188	36475	66	14.5	120.64	482	19.5	69.30 3100	29.0	92.21 161	157.0	5.40 1996										-1200
-1100	25.5	179.0 171	25.5	84.846	35307	63	10.0	211.42	468	24.5	29.01 3004	25.0	24.47 156	32.5	4.28 1935										-1100
-1000	1.0	55.7 166	13.0	159.616	34252	60	6.0	8.34	453	29.0	322.76 2910	20.5	54.78 151	114.0	0.76 1874										-1000
-900	5.5	41.0 160	0.5	235.503	33131	57	1.5	99.41	438	2.5	71.56 2816	16.0	85.14 146	195.0	11.86 1813										-900
-800	10.0	25.7 155	16.0	18.514	32005	54	12.0	52.63	422	7.5	28.42 2722	12.0	17.55 141	70.5	12.56 1752										-800
-700	14.5	9.9 150	3.5	96.654	30872	52	7.5	144.01	406	12.0	319.34 2628	7.5	48.01 136	152.0	10.88 1690										-700
-600	18.5	200.5 144	18.5	211.929	29735	50	3.0	235.55	390	17.0	274.32 2533	3.0	78.52 131	27.5	12.82 1629										-600
-500	23.0	183.6 139	6.0	292.343	28594	48	13.5	189.25	374	22.0	228.35 2439	28.5	17.08 125	109.0	12.37 1507										-500
-400	27.5	166.1 133	21.5	79.901	27448	46	9.0	281.10	358	27.0	181.44 2344	24.0	47.70 120	100.5	12.54 1505										-400
-300	3.0	39.2 128	9.0	162.606	26300	45	5.0	79.12	343	0.0	259.58 2247	19.5	78.37 115	66.5	2.33 1443										-300
-200	7.5	20.6 122	24.0	282.460	25148	43	0.5	171.29	337	0.5	210.75 2149	15.5	11.10 110	148.0	3.74 1380										-200
-100	12.0	1.5 117	12.0	37.468	23994	42	11.0	125.62	312	10.0	160.95 2050	11.0	41.87 105	23.5	8.79 1316										-100
0	16.0	188.0 111	27.0	159.631	22838	41	6.5	218.10	298	15.0	110.15 1950	6.5	72.70 100	105.0	11.47 1252										0
+ 100	20.5	168.6 106	14.5	246.952	21678	39	2.5	16.72	284	20.0	58.36 1850	2.5	5.57 95	187.0	0.78 1188										+ 100
200	25.0	147.8 100	2.5	5.434	20515	37	12.5	265.48	269	25.0	5.56 1749	27.5	42.49 90	62.5	7.74 1124										200
300	0.5	17.5 94	17.5	131.081	19349	35	8.5	64.39	255	29.5	286.75 1647	23.0	73.46 85	144.0	12.34 1059										300
400	4.5	202.6 89	5.0	221.897	18178	32	4.0	157.44	241	3.0	22.91 1544	19.0	6.48 80	20.0	6.59 994										400
500	9.0	180.1 83	20.5	19.886	17002	30	14.5	112.63	226	7.5	302.05 1441	14.5	37.54 75	101.5	12.49 929										500
600	13.5	157.1 77	8.0	113.054	15820	27	10.0	205.96	211	12.5	245.16 1339	10.0	68.66 70	183.5	5.03 864										600
700	18.0	133.5 71	23.0	243.406	14633	24	6.0	5.45	196	17.5	187.25 1237	6.0	1.82 65	59.5	1.23 799										700
800	22.5	109.3 66	11.0	8.949	13439	21	1.5	99.09	180	22.5	128.32 1136	1.5	33.03 60	141.0	9.09 734										800
900	27.0	84.5 60	26.0	141.689	12239	18	12.0	54.88	164	27.5	68.37 1035	26.5	70.30 55	17.0	6.59 668										900
1000	2.0	157.1 54	13.5	239.631	11034	15	7.5	148.84	147	0.5	133.42 934	22.5	3.62 50	99.0	1.75 602										1000
1100	6.5	131.1 48	1.5	8.782	9822	13	3.0	242.97	130	5.5	71.46 833	18.0	34.99 44	180.5	11.57 536										1100
1200	11.0	104.6 42	16.5	145.147	8606	11	13.5	199.26	113	10.5	8.49 732	13.5	66.42 38	56.5	11.04 470										1200
1300	15.5	77.4 36	4.0	246.730	7386	9	9.0	293.73	97	15.0	279.51 631	9.0	97.91 32	138.5	8.18 404										1300
1400	20.0	49.7 30	19.5	55.534	6162	7	5.0	94.36	80	20.0	214.52 529	5.0	31.46 26	14.5	8.97 338										1400
1500	24.5	21.4 + 24	7.0	159.565	-4935	-6	0.5	189.17	-64	25.0	148.51 + 426	0.5	63.06 - 21	96.5	7.43 - 271										1500
Gregorian	1500	14.5	21.4 + 24	24.5	195.568	-4935	-6	5.5	51.17	-64	15.0	148.51 + 426	20.0	60.06 - 21	86.5	7.43 - 271									Gregorian
1600	18.5	199.4 18	12.0	300.827	3795	4	1.0	146.13	47	20.0	81.46 321	16.0	2.71 16	168.5	6.56 204										1600
1700	22.0	169.9 12	26.5	113.317	2472	3	10.5	103.26	31	24.0	13.37 215	10.5	34.42 11	43.5	9.36 136										1700
1800	25.5	139.8 + 6	13.0	221.040	-1238	-2	5.0	198.55	-15	27.5	279.22 + 108	5.0	66.18 - 5	124.5	9.84 - 68										1800
1900	0.0	0.0 0	0.0	0.000	0	0	0.0	0.00	0	0.0	0.00 0	0.0	0.00 0	0.0	0.00 0										1900
2000	4.0	175.6 - 6	15.0	146.199 + 1241	+ 2	10.0	251.60 + 15	4.5	263.71 - 108	25.0	37.86 + 5	82.0	1.84 + 60												2000
2100	7.5	143.6 12	1.5	257.641	2486	4	5.0	53.35	30	8.5	191.32 217	19.5	69.78 10	163.0	4.37 138										2100
2200	11.0	111.0 18	16.0	76.329	3735	7	14.5	11.25	45	12.5	117.85 326	14.5	3.75 15	38.0	10.60 207										2200
2300	14.5	77.8 25	2.5	190.269	4989	9	9.0	107.30	61	16.5	43.29 436	9.0	35.77 20	119.5	0.51 277										2300
2400	19.0	44.0 31	18.0	11.467	6249	12	4.5	203.51	77	21.0	302.03 545	4.5	67.84 25	201.5	5.12 346										2400
2500	22.5	9.5 37	4.5	127.927	7515	16	14.0	161.87	93	25.0	225.89 653	29.0	7.96 31	76.5	13.42 416										2500
2600	25.5	181.4 44	18.5	281.656	8787	19	8.5	258.40	110	29.0	148.06 761	23.5	49.14 36	158.0	5.42 485										2600
2700	0.0	36.7 50	5.0	70.660	10665	22	3.5	61.10	128	1.0	195.15 869	18.0	72.37 42	33.5	1.11 555										2700
2800	4.5	0.3 56	20.5	226.946	11350	25	14.0	19.98	145	6.0	115.16 976														

TABLE 2 (cont.). Additions to the Arguments for the Centuries of the Julian and Gregorian Calendars.

Arg.	35 (a)		36 (a)		37 (a)		38 (a)		39 (a)		40 (a)		41 (a)		Arg.							
Julian	d	e	d	c	d	c	d	c	d	c	d	c	d	c	Julian							
-2000	3.0	93.52	-1687	11.5	80.9	+134	7.0	233.5	+90	2.0	117.8	-241	3.5	28.7	-14	2.0	288.13	+27	143.5	14.9	+52	-2000
-1900	3.5	99.25	1647	0.5	91.4	131	5.5	312.9	88	0.5	185.4	235	3.5	14.6	14	8.5	102.30	27	100.5	2.7	51	-1900
-1800	8.0	45.39	1607	5.5	79.7	128	4.0	392.0	85	6.5	30.7	229	3.5	0.6	13	1.0	161.47	26	57.0	11.3	49	-1800
-1700	0.5	235.92	1567	10.5	67.6	125	3.0	74.9	83	5.0	99.5	224	3.0	17.6	13	7.0	286.63	26	13.5	19.8	48	-1700
-1600	3.0	212.85	1527	15.5	55.2	121	1.5	153.6	81	3.5	168.8	218	3.0	3.7	13	0.0	34.78	25	143.5	20.2	47	-1600
-1500	5.5	190.18	1487	4.5	64.4	118	0.0	232.1	79	2.0	238.8	212	2.5	20.7	12	6.0	150.93	25	100.5	7.5	46	-1500
-1400	8.0	167.91	1447	9.5	51.3	115	8.5	377.4	77	1.0	10.4	206	2.5	6.8	12	12.0	285.08	24	57.0	15.7	44	-1400
-1300	1.0	83.05	1406	14.5	37.9	112	7.5	59.5	75	6.5	157.5	200	2.0	24.0	12	5.0	33.22	24	14.0	2.7	43	-1300
-1200	3.5	61.58	1365	3.5	46.2	108	6.0	137.3	72	5.0	220.2	194	2.0	10.1	11	11.0	158.35	23	144.0	2.6	42	-1200
-1100	6.0	40.53	1324	8.5	32.2	105	4.5	214.9	70	4.0	2.5	188	1.5	27.3	11	3.5	217.47	22	100.5	10.4	41	-1100
-1000	8.5	19.89	1282	13.5	17.8	102	3.0	292.3	68	2.5	75.4	182	1.5	13.6	11	10.0	31.59	22	57.0	18.0	39	-1000
-900	1.0	213.67	1240	2.5	25.1	98	1.5	369.5	66	1.0	148.9	176	1.0	30.9	10	2.5	90.70	21	14.0	4.5	38	-900
-800	3.5	193.87	1197	7.5	10.0	95	0.5	50.5	64	7.0	0.0	170	1.0	17.2	10	8.5	215.81	21	144.0	3.9	37	-800
-700	6.0	174.49	1154	12.0	111.6	92	9.0	194.2	61	5.5	74.7	164	1.0	3.5	9	1.0	274.91	20	100.5	11.2	36	-700
-600	8.5	155.55	1111	1.5	0.9	88	7.5	270.7	59	4.0	150.0	158	0.5	20.9	9	7.5	89.01	19	57.0	18.3	34	-600
-500	4.5	74.04	1068	6.0	101.9	85	6.0	347.0	57	2.5	225.9	152	0.5	7.3	9	0.0	148.10	19	14.0	4.2	33	-500
-400	4.0	55.06	1025	11.0	8.5	82	5.0	27.1	55	1.5	3.4	146	0.0	24.7	8	6.0	273.18	18	144.0	3.2	32	-400
-300	6.5	38.31	981	0.0	90.7	78	3.5	102.9	52	0.0	80.5	140	0.0	11.2	8	12.5	87.25	17	100.5	10.0	30	-300
-200	9.0	21.10	938	5.0	73.7	75	2.0	178.5	50	5.5	234.3	134	5.5	17.7	8	5.0	146.32	17	57.0	16.6	29	-200
-100	1.5	218.32	895	10.0	56.3	71	0.5	253.9	48	4.5	13.6	128	5.5	4.3	7	11.0	271.38	16	14.0	2.0	28	-100
0	4.0	201.97	852	15.0	38.5	68	9.5	0.1	45	3.0	92.6	122	5.0	21.9	7	4.0	19.43	15	144.0	0.4	26	0
+100	6.5	186.05	809	4.0	42.4	64	8.0	75.0	43	1.5	172.2	115	5.0	8.5	7	10.0	144.48	14	100.5	6.6	25	+100
200	9.0	170.56	766	9.0	23.9	61	6.5	149.7	41	0.0	252.4	109	4.5	26.2	6	2.5	203.52	14	57.0	12.7	24	200
300	2.0	92.49	723	14.0	5.1	58	5.0	224.1	38	6.0	110.2	103	4.5	12.9	6	9.0	17.55	13	13.5	18.6	22	300
400	4.5	77.86	680	3.0	8.0	55	3.5	298.3	36	4.5	191.6	97	4.0	30.6	6	1.5	76.58	12	143.5	16.4	21	400
500	7.0	63.65	637	7.5	105.5	51	2.0	372.3	34	3.0	273.7	90	4.0	17.4	5	7.5	201.59	12	100.5	1.1	20	500
600	9.5	49.88	593	12.5	85.6	47	1.0	50.1	31	2.0	57.4	84	4.0	4.2	5	0.0	260.00	11	57.0	6.6	18	600
700	2.0	250.55	549	1.5	87.4	43	9.5	190.6	29	0.5	140.8	78	3.5	22.0	4	6.5	74.60	10	13.5	12.0	17	700
800	4.5	237.66	504	6.5	66.9	40	8.0	263.9	27	6.5	1.7	71	3.5	8.9	4	12.5	199.60	9	143.5	9.3	15	800
900	7.0	225.22	459	11.5	46.0	36	6.5	330.9	24	5.0	86.3	65	3.0	26.8	4	5.0	258.59	8	100.0	14.4	14	900
1000	0.0	150.23	414	0.5	46.7	33	5.5	13.7	22	3.5	171.6	59	3.0	13.8	3	11.5	72.57	8	56.5	19.4	13	1000
1100	2.5	138.09	368	5.5	25.1	29	2.0	86.2	20	2.0	257.5	54	3.0	0.7	3	4.0	131.54	7	13.5	3.3	11	1100
1200	5.0	127.62	322	10.5	3.1	26	2.5	158.6	17	1.0	45.0	46	2.5	18.8	3	10.0	256.50	6	143.5	0.0	10	1200
1300	7.5	117.00	275	15.0	97.7	22	1.0	230.6	15	6.5	208.2	39	2.5	5.8	2	3.0	4.45	5	100.0	4.5	9	1300
1400	0.5	43.85	229	4.0	97.0	18	9.5	369.5	12	5.0	296.0	33	2.0	23.9	2	9.0	129.40	4	56.5	9.0	7	1400
1500	3.0	34.16	-183	9.0	74.0	+15	8.5	45.1	+10	4.0	85.5	-26	2.0	11.1	-2	1.5	188.34	+3	13.0	13.3	+6	1500
Gregorian															Gregorian							
1500	2.5	97.16	-183	15.0	52.0	+15	8.5	112.1	+10	1.0	161.5	-26	3.5	20.1	-2	5.0	254.34	+3	3.0	13.3	+6	1500
1600	5.0	87.93	137	4.0	50.5	11	7.0	183.4	7	7.0	27.7	20	3.5	7.3	1	11.5	68.27	3	133.0	9.4	4	1600
1700	6.5	79.16	91	8.0	26.7	7	4.5	254.5	5	4.5	117.4	13	2.0	25.5	-1	3.0	127.19	2	88.5	13.4	3	1700
1800	8.0	70.85	-45	12.0	2.5	+4	2.0	323.4	+2	7.0	207.9	-7	1.0	12.7	0	8.0	252.10	+1	44.0	17.3	+1	1800
1900	0.0	0.00	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.0	0	0.0	0.00	0	0.0	0.0	0	1900
2000	2.0	260.00	+46	4.5	92.1	-4	8.5	137.4	-2	5.5	167.8	+7	7.5	7.3	0	6.0	124.80	-1	129.5	16.6	-1	2000
2100	3.5	262.66	92	8.5	66.8	7	6.0	207.5	5	3.0	260.2	13	4.0	25.7	+1	11.0	249.78	2	85.0	20.0	3	2100
2200	5.0	256.18	138	12.5	41.4	11	3.5	277.3	7	1.0	54.3	20	3.0	13.1	1	2.5	308.66	3	41.0	2.3	4	2200
2300	6.5	250.16	185	0.5	37.1	15	1.0	347.0	10	5.5	224.1	27	2.0	0.5	2	8.0	122.52	4	169.5	18.4	6	2300
2400	9.0	244.61	231	5.5	10.7	19	0.0	20.3	13	4.5	19.5	33	1.5	19.0	2	0.5	181.38	5	126.5	9.4	7	2400
2500	1.0	170.32	278	9.0	100.9	22	7.5	156.4	15	2.0	114.6	40	0.5	6.5	2	5.5	306.23	5	82.0	3.3	9	2500
2600	2.5	171.90	326	13.0	73.8	26	5.0	225.3	18	6.5	286.4	47	5.0	14.1	3	11.0	120.07	6	37.5	0.0	10	2600
2700	4.0	167.76	374	1.0	68.2	30	2.5	293.9	20	4.5	83.9	54	4.0	1.7	3	2.5	178.90	7	166.5	0.5	12	2700
2800	6.5	164.10	423	6.0	40.3	34	1.0	302.2	23	3.0	181.1	61	3.5	20.3	3	8.5	303.72	8	123.0	2.9	13	2800
2900	8.0	160.93	+473	10.0	12.0	-38	9.0	101.3	-25	0.5	278.9	+67	2.5	8.0	+4	0.5	51.53	-9	78.5	5.2	-15	2900

TABLE 2 (cont.). Additions to the Arguments for the Centuries of the Julian and Gregorian Calendars.

Arg.	42 (a)		43 (a)		44 (a)		45 (a)		46 (a)		47 (a)		48	Arg.
Julian	<i>d</i>	<i>c</i>	<i>d</i>	<i>c</i>	<i>d</i>	<i>c</i>	<i>d</i>	<i>c</i>	<i>d</i>	<i>c</i>	<i>d</i>	<i>c</i>		Julian
-2000	5.0	133.9 + 206	1.0	171.7 - 84	3.5	95.7 - 16	5.0	72.9 + 47	0.5	60.8 - 46	50.5	3.61 - 17	31	-2000
-1900	2.5	124.5 201	1.5	2.3 82	4.5	146.7 16	1.5	18.8 45	4.5	34.0 45	49.5	5.21 15	89	-1900
-1800	0.0	114.7 196	1.5	22.1 80	6.0	18.7 16	7.0	105.6 44	1.5	28.4 44	48.5	6.83 12	148	-1800
-1700	24.5	67.4 191	1.5	42.2 78	0.0	40.7 15	3.5	51.3 43	5.5	1.9 43	47.5	8.48 10	43	-1700
-1600	22.0	56.6 186	1.5	62.4 76	1.0	91.8 15	9.5	4.8 42	2.0	64.5 42	46.5	10.15 7	102	-1600
-1500	19.5	45.2 181	1.5	82.8 74	2.0	142.9 14	5.5	83.3 41	6.0	38.3 40	45.5	11.86 4	156	-1500
-1400	17.0	33.4 176	1.5	103.4 72	3.5	15.1 14	2.0	28.7 40	3.0	33.1 39	44.5	13.59 - 1	55	-1400
-1300	14.5	21.1 171	1.5	124.2 70	4.5	66.3 14	7.5	114.9 39	0.0	28.0 38	43.5	15.36 + 1	110	-1300
-1200	12.0	8.3 166	1.5	145.3 68	5.5	117.6 13	4.0	60.0 38	4.0	2.1 37	42.5	17.15 4	9	-1200
-1100	9.0	147.0 161	1.5	166.5 66	6.5	168.0 13	6.5	5.0 36	0.5	68.3 36	41.5	18.97 6	63	-1100
-1000	6.5	133.2 156	1.5	187.9 64	1.0	12.2 12	6.0	90.9 35	4.5	39.6 35	40.5	20.80 7	121	-1000
-900	4.0	118.8 151	2.0	20.6 62	2.0	63.6 12	2.5	35.7 34	1.5	35.0 34	39.5	22.64 8	21	-900
-800	1.5	104.0 146	2.0	42.5 60	3.0	115.0 12	8.0	121.4 33	5.5	9.5 33	38.5	24.50 9	75	-800
-700	26.0	51.6 141	2.0	64.5 58	4.0	166.4 11	4.5	65.9 32	2.5	5.1 31	38.0	1.36 9	133	-700
-600	23.5	35.8 135	2.0	86.8 55	5.5	38.9 11	1.0	10.4 31	6.0	47.8 30	37.0	3.21 9	28	-600
-500	21.0	19.4 130	2.0	109.3 53	6.5	90.4 10	6.5	95.7 29	3.0	43.7 29	36.0	5.07 9	86	-500
-400	18.5	2.5 125	2.0	132.0 51	0.5	113.0 10	3.0	39.9 28	0.0	39.7 28	35.0	6.93 9	140	-400
-300	15.5	137.0 120	2.0	155.0 49	1.5	164.6 10	8.5	125.0 27	4.0	14.7 27	34.0	8.79 9	40	-300
-200	13.0	119.1 115	2.0	178.1 47	3.0	37.3 9	5.0	68.9 26	1.0	10.9 25	33.0	10.64 9	94	-200
-100	10.5	100.6 109	2.5	12.4 45	4.0	89.0 9	1.5	12.8 25	4.5	54.3 24	32.0	12.50 10	152	-100
0	8.0	81.6 104	2.5	36.0 43	5.0	140.7 8	7.0	97.5 24	1.5	50.7 23	31.0	14.37 11	47	0
+ 100	5.5	62.1 99	2.5	59.8 40	6.5	13.5 8	3.5	41.1 22	5.5	26.3 22	30.0	16.25 12	105	+ 100
200	3.0	42.1 93	2.5	83.8 38	0.5	36.3 7	9.0	125.6 21	2.5	22.0 21	29.0	18.13 13	4	200
300	0.5	21.5 88	2.5	108.0 36	1.5	88.2 7	5.5	69.0 20	6.0	66.7 20	28.0	20.03 14	58	300
400	24.5	115.3 83	2.5	132.5 34	2.5	140.1 7	2.0	12.2 19	3.0	63.7 18	27.0	21.94 15	116	400
500	22.0	93.7 77	2.5	157.2 32	4.0	13.1 6	7.5	96.3 18	0.0	60.7 17	26.0	23.87 16	10	500
600	19.5	71.5 72	2.5	182.1 29	5.0	65.1 6	4.0	39.3 16	4.0	36.8 16	25.5	0.80 16	68	600
700	17.0	48.8 67	3.0	18.2 27	6.0	117.1 5	0.0	115.2 15	1.0	34.1 15	24.5	2.73 16	122	700
800	14.5	25.5 61	3.0	43.5 25	0.0	140.2 5	6.0	66.0 14	5.0	10.5 14	23.5	4.66 16	21	800
900	12.0	1.7 56	3.0	69.0 23	1.5	13.3 4	2.5	8.6 13	2.0	8.0 12	22.5	6.59 15	75	900
1000	9.0	129.3 50	3.0	94.8 21	2.5	65.5 4	8.0	92.1 11	5.5	52.7 11	21.5	8.51 13	133	1000
1100	6.5	104.4 45	3.0	120.8 18	3.5	117.7 4	4.5	34.5 10	2.5	59.4 10	20.5	10.41 11	32	1100
1200	4.0	78.9 39	3.0	147.0 16	4.5	170.0 3	0.5	109.7 9	6.5	27.3 9	19.5	12.20 9	85	1200
1300	1.5	52.9 34	3.0	173.5 14	6.0	43.3 3	6.5	59.9 8	3.5	25.3 7	18.5	14.16 7	143	1300
1400	25.5	141.3 28	3.5	11.2 11	0.0	66.6 2	3.0	1.9 6	0.5	23.5 6	17.5	16.00 5	38	1400
1500	23.0	114.2 + 23	3.5	38.1 - 9	1.0	119.0 - 2	8.5	84.8 + 5	4.5	0.7 - 5	16.5	17.83 + 4	95	1500
Gregorian														Gregorian
1500	13.0	114.2 + 23	2.5	79.1 - 9	5.0	177.0 - 2	8.0	92.8 + 5	1.0	47.7 - 5	6.5	17.83 + 4	91	1500
1600	10.5	80.5 17	2.5	106.2 7	6.5	50.4 1	4.5	34.5 4	5.0	25.1 4	5.5	19.64 3	149	1600
1700	7.0	58.2 11	1.5	133.6 5	6.5	102.0 - 1	9.0	117.1 3	1.0	23.6 3	3.5	21.44 2	44	1700
1800	3.5	29.4 + 6	0.5	161.2 - 2	6.5	155.4 0	4.5	58.6 + 1	4.0	1.2 - 1	1.5	23.22 + 1	101	1800
1900	0.0	0.0 0	0.0	0.0 0	0.0	0.0 0	0.0	0.0 0	0.0	0.0 0	0.0	0.00 0	0	1900
2000	24.0	85.0 - 6	0.0	28.1 + 2	1.0	52.6 0	5.5	82.2 - 1	3.5	45.9 + 1	36.0	14.77 - 1	54	2000
2100	20.5	54.5 11	8.0	97.4 5	1.0	105.3 + 1	1.0	23.3 3	6.5	23.9 3	36.0	16.53 1	111	2100
2200	17.0	23.4 17	7.0	125.9 7	1.0	158.0 1	5.5	105.3 4	2.5	23.0 4	36.0	18.29 2	6	2200
2300	13.0	143.8 23	6.0	154.6 9	1.5	31.7 2	1.0	46.2 5	5.5	1.3 5	35.0	20.04 3	63	2300
2400	10.5	111.5 29	6.0	183.6 12	2.5	84.5 2	6.5	127.9 6	2.5	0.7 6	35.0	21.78 5	117	2400
2500	7.0	78.7 34	5.5	23.8 14	2.5	137.3 3	2.0	68.5 8	5.0	47.2 8	35.0	23.51 7	15	2500
2600	3.5	45.3 40	4.5	53.3 16	3.0	11.2 3	7.0	17.0 9	1.0	46.9 9	35.5	0.21 9	69	2600
2700	0.0	11.3 46	3.5	83.0 19	3.0	64.1 4	2.0	90.3 10	4.0	25.6 10	35.5	1.89 12	126	2700
2800	24.0	91.8 52	3.5	113.0 21	4.0	117.1 4	8.0	38.5 12	1.0	25.6 12	35.0	3.54 15	20	2800
2900	20.5	56.6 - 58	2.5	143.2 + 24	4.0	170.1 + 5	3.0	111.6 - 13	4.0	4.6 + 13	34.8	5.16 - 18	78	2900

TABLE 2 (cont.). Additions to the Arguments for the Centuries of the Julian and Gregorian Calendars.

Arg.	49	50	51 (a)		52		53 (a)		54 (a)		55 (a)		56 (a)		57 (a)		Arg.
Julian	<i>d</i>	<i>c</i>	<i>d</i>	<i>c</i>	<i>d</i>	<i>c</i>	Julian										
-2000	9'98	63	10'0	2-2	21'0	1	22'0	2'0-19	26'5	15'2-20	24'5	12'50-583	1'0	20'7-22	2'0	28'8+40	-2000
-1900	11'10	13	8'0	5 2	5'5	0	3'5	9'7 19	11'0	8'6 19	7'5	48'75 570	2'5	7'7'22	12'0	61'7 39	-1900
-1800	12'22	64	6'0	8 2	12'0	1	20'5	10'4 18	25'0	17'0 19	23'0	28'04 556	4'5	54'8 21	6'0	89'6 38	-1800
-1700	13'35	15	4'0	12 2	18'5	2	3'0	18'1 18	9'5	10'5 18	6'0	64'48 543	6'5	31'9 21	0'5	5'3 37	-1700
-1600	0'84	15	2'0	15 2	3'0	0	19'0	18'9 17	23'5	19'0 18	21'5	44'04 530	8'5	9'1 20	10'5	38'0 36	-1600
-1500	1'97	67	0'5	0 2	9'5	1	0'5	26'7 17	8'0	12'6 17	4'5	80'73 517	0'0	45'3 20	4'5	65'6 35	-1500
-1400	3'09	17	11'0	13 2	16'0	2	17'5	27'6 16	22'0	21'2 17	20'0	60'56 504	2'0	22'6 19	14'5	98'0 34	-1400
-1300	4'21	69	9'0	17 2	0'5	1	34'5	28'5 16	6'5	14'9 16	3'0	97'51 491	4'0	0'0 19	9'0	13'4 33	-1300
-1200	5'34	19	7'5	1 2	7'0	2	16'0	36'5 16	20'5	23'6 16	18'5	77'60 477	5'5	57'4 18	3'0	40'7 32	-1200
-1100	6'46	70	5'5	5 2	14'0	0	33'0	37'5 15	5'0	17'4 15	1'5	114'82 463	7'5	34'8 17	13'0	72'9 31	-1100
-1000	7'59	21	3'5	9 2	20'5	1	15'0	6'5 15	19'0	26'2 15	17'0	95'19 448	9'5	12'3 17	7'0	100'0 30	-1000
-900	8'71	72	1'5	13 2	5'0	0	32'0	7'6 14	3'5	20'1 14	0'5	2'70 433	1'0	48'9 16	1'5	14'9 29	-900
-800	9'84	23	12'5	7 1	11'5	1	13'5	15'7 14	17'5	29'0 14	15'5	113'37 418	3'0	26'5 16	11'5	46'8 28	-800
-700	10'96	74	10'5	11 1	18'0	2	30'5	16'9 13	2'0	23'0 13	31'0	94'18 402	5'0	4'2 15	5'5	73'6 27	-700
-600	12'09	25	8'5	15 1	2'5	1	12'0	25'1 13	16'0	32'0 13	14'5	2'15 386	6'5	61'9 15	15'5	105'3 26	-600
-500	13'21	76	7'0	0 1	9'0	1	29'0	26'4 12	0'5	26'1 12	29'5	113'28 370	8'5	39'7 14	10'0	19'9 25	-500
-400	0'71	76	5'0	4 1	15'5	2	10'5	34'7 12	14'5	35'2 12	13'0	21'57 355	0'0	76'6 14	4'0	46'4 24	-400
-300	1'83	27	3'0	8 1	0'0	1	27'5	36'1 11	28'5	44'4 11	28'5	3'02 340	2'0	54'5 13	14'0	77'7 23	-300
-200	2'96	79	1'0	13 1	6'5	2	9'5	5'5 11	13'0	38'6 11	11'5	41'62 325	4'0	32'4 12	8'0	104'0 22	-200
-100	4'08	29	12'0	8 1	13'5	0	26'5	7'0 10	27'5	0'9 10	27'0	23'37 310	6'0	10'4 12	2'5	18'2 21	-100
0	5'21	81	10'0	12 1	20'0	1	8'0	15'5 10	11'5	42'2 10	10'0	62'27 295	7'5	68'5 11	12'5	49'3 20	0
+ 100	6'34	31	8'0	16 1	4'5	0	25'0	17'1 9	26'0	4'6 9	25'5	44'31 280	9'5	46'6 11	6'5	75'3 19	+ 100
200	7'46	83	6'5	2 1	11'0	1	6'5	25'7 9	10'0	46'0 9	8'5	83'50 266	1'5	3'8 10	0'5	102'2 18	200
300	8'59	33	4'5	6 1	17'5	2	23'5	27'4 8	24'5	8'5 8	24'0	65'83 252	3'0	62'1 10	11'0	19'9 17	300
400	9'71	85	2'5	11 1	2'0	1	5'0	36'1 8	0'0	3'0 8	7'0	105'30 238	5'0	40'4 9	5'0	45'6 16	400
500	10'84	36	0'5	15 1	8'5	2	22'0	37'9 7	23'0	12'6 7	22'5	87'91 224	7'0	18'7 8	15'0	76'2 15	500
600	11'97	87	11'5	11 1	15'5	0	4'0	7'7 7	7'5	7'2 7	5'5	127'66 209	8'5	77'1 8	9'0	101'6 14	600
700	13'10	33	9'5	15 1	22'0	1	21'0	9'5 6	21'5	16'9 6	21'0	110'56 194	0'5	34'6 7	3'5	15'0 13	700
800	0'59	38	8'0	1 1	6'5	0	2'5	18'4 6	6'0	11'6 6	4'5	20'62 178	2'5	13'2 7	13'5	45'2 12	800
900	1'72	90	6'0	6-1	13'0	1	19'5	20'4 5	20'0	21'4 5	20'0	3'83 162	4'0	71'8 6	7'5	70'4 11	900
1000	2'85	40	4'0	10 0	19'5	2	1'0	29'4 5	4'5	16'2 5	3'0	44'20 146	6'0	50'4 5	1'5	95'4 10	1000
1100	3'97	92	2'0	15 0	4'0	1	18'0	31'5 4	18'5	20'1 4	18'5	27'74 129	8'0	29'1 5	12'0	13'4 9	1100
1200	5'10	43	0'5	1 0	10'5	2	0'0	1'6 4	3'0	21'0 4	1'5	68'44 112	10'0	7'9 4	6'0	38'2 8	1200
1300	6'23	94	11'0	16 0	17'5	1	17'0	3'8 3	17'0	31'0 3	17'0	52'31 95	1'5	45'7 4	0'0	62'9 6	1300
1400	7'36	45	9'5	2 0	2'0	0	34'0	6'0 3	1'5	26'1 3	0'0	93'35 78	3'5	24'6 3	10'0	92'5 5	1400
1500	8'49	96	7'5	7 0	8'5	1	15'5	15'3-2	15'5	36'2-2	15'5	77'56-62	5'5	3'6-2	4'5	5'0+4	1500
Gregorian																	Gregorian
1500	12'12	46	10'0	17 0	21'0	0	5'5	15'3-2	5'5	36'2-2	5'5	77'56-62	5'5	24'6-2	10'5	10'0+4	1500
1600	13'25	98	8'5	3 0	5'0	2	22'5	17'7-2	2'0	46'3-2	2'0	61'93 46	7'5	3'6-2	4'5	34'4 3	1600
1700	13'38	49	5'5	8 0	11'0	0	3'0	27'1-1	1'0	41'5-1	1'0	103'46 30	8'0	62'7 1	13'5	63'7 2	1700
1800	13'50	100	2'5	14 0	16'5	1	19'0	29'5-1	1'6'5	4'7-1	1'7'5	88'15-15	9'0	41'8-1	1'0	87'9+1	1800
1900	0'00	0	0'0	0 0	0'0	0	0'0	0'0 0	0'0	0'0 0	0'0	0'00 0	0'0	0'0 0	0'0	0'0 0	1900
2000	1'13	52	10'5	15 0	6'5	1	17'0	2'6+1	14'0	10'3+1	15'0	115'00+15	1'5	59'3+1	10'0	29'0-1	2000
2100	1'26	2	8'0	2 0	12'0	2	33'0	5'2 1	1'0	27'0 1	1'0	100'15 30	2'5	38'6 1	3'0	52'8 2	2100
2200	1'39	54	5'0	7 0	18'0	0	13'5	14'9 2	10'5	16'2 2	12'0	12'45 46	3'5	18'0 2	12'0	81'6 3	2200
2300	1'52	5	2'0	13 0	1'0	2	29'5	17'6 2	23'5	26'7 2	26'0	127'90 61	4'0	77'4 2	5'0	105'2 4	2300
2400	2'05	56	0'0	18 0	8'0	1	11'0	27'4 3	8'0	22'2 3	9'5	40'50 77	6'0	56'9 3	15'5	21'7 6	2400
2500	2'18	7	10'0	15 0	13'5	2	27'0	30'2 3	21'0	32'8 3	24'0	26'27 93	7'0	36'5 4	8'5	45'1 7	2500
2600	2'91	59	7'5	2 0	19'5	0	8'0	1'1 4	4'5	28'5 4	6'0	69'20 110	8'0	16'1 4	1'5	68'4 8	2600
2700	3'04	9	4'5	7 0	2'5	2	24'0	4'0 5	17'5	39'2 4	20'5	55'30 127	8'5	75'8 5	10'5	96'6 9	2700
2800	4'17	61	2'5	13+1	9'5	0	5'5	14'0 5	2'0	34'9 5	3'5	98'56 145	0'5	34'6 6	5'0	7'7 10	2800
2900	4'30	12	0'0	0+1	15'0	1	21'5	17'1+6	15'0	45'7+5	18'0	85'01+162	1'5	14'4+6	14'0	35'7-11	2900

TABLE 2 (cont.). Additions to the Arguments for the Centuries of the Julian and Gregorian Calendars.

Arg.	58 (a)	59 (a)	60 (a)	61 (a)	62 (a)	63	64	65	66	Arg.
Julian	<i>d</i>	<i>d</i> <i>c</i>	Julian							
-2000	1340.4 +55	41.0 0.56 -337	10.5 166.6 -162	10.0 24.8 -147	6.5 177 -22	6.61	26	20.8	22	-2000
-1900	634.9 53	54.5 1.54 329	11.0 135.9 158	6.5 17.1 144	2.5 144 22	1.83	16	5.2	3	-1900
-1800	2119.9 52	68.0 2.59 321	11.5 105.6 154	3.0 9.7 140	8.0 176 21	29.18	0	15.7	27	-1800
-1700	1414.2 51	81.5 3.73 313	12.0 75.7 150	27.0 45.7 137	4.0 144 21	24.40	26	0.1	8	-1700
-1600	708.4 49	95.0 4.94 304	12.5 46.2 146	23.5 39.0 133	0.0 113 20	19.62	16	10.6	32	-1600
-1500	2.4 48	109.0 1.24 296	13.0 17.1 143	20.0 32.7 130	5.5 147 20	14.84	6	21.1	11	-1500
-1400	1486.8 47	122.5 2.62 288	13.0 159.3 139	16.5 26.8 126	1.5 117 19	10.06	32	5.5	37	-1400
-1300	780.6 46	136.0 4.08 280	13.5 131.0 135	13.0 21.2 123	7.0 152 19	5.28	22	16.0	16	-1300
-1200	74.2 44	150.0 0.62 272	14.0 103.0 131	9.5 15.9 119	3.0 123 18	0.50	12	0.5	42	-1200
-1100	1558.2 43	103.5 2.24 263	14.5 75.5 127	6.0 11.0 115	8.5 159 18	27.85	32	11.0	21	-1100
-1000	851.6 42	177.0 3.95 255	0.0 94.3 123	2.5 6.5 112	4.5 131 17	23.07	22	21.5	0	-1000
-900	144.9 40	2.5 3.75 247	0.5 67.6 119	26.5 45.4 108	0.5 104 16	18.29	13	5.9	26	-900
-800	1628.5 39	16.5 0.62 239	1.0 41.2 115	23.0 41.6 104	6.0 141 16	13.52	3	16.4	5	-800
-700	921.4 37	30.0 2.58 230	1.5 15.2 110	19.5 38.2 101	2.0 115 15	8.74	28	0.8	31	-700
-600	214.3 36	43.5 4.62 222	1.5 160.7 106	16.0 35.1 97	7.5 154 15	3.96	19	11.3	10	-600
-500	1697.5 35	57.5 1.75 213	2.0 135.6 102	12.5 32.4 93	3.5 129 14	31.31	3	21.8	34	-500
-400	990.0 33	71.0 3.96 205	2.5 110.8 98	9.0 30.1 90	9.0 169 14	26.53	29	6.2	15	-400
-300	282.4 32	85.0 1.26 196	3.0 86.5 94	5.5 28.2 86	5.0 145 13	21.75	19	16.7	39	-300
-200	1765.2 31	98.5 3.64 188	3.5 62.6 90	2.0 26.7 82	1.0 122 12	16.97	9	1.1	20	-200
-100	1057.4 29	112.5 1.11 179	4.0 39.1 86	26.5 15.5 78	6.5 163 12	12.19	0	11.6	44	-100
0	349.4 28	126.0 3.67 170	4.5 16.0 82	23.0 14.7 75	2.5 141 11	7.41	25	22.1	23	0
+100	1831.7 26	140.0 1.31 162	4.5 164.3 78	19.5 14.3 71	8.0 184 11	2.63	15	6.6	4	+100
+200	1123.4 25	153.5 4.04 153	5.0 142.0 73	16.0 14.3 67	4.0 163 10	29.98	0	17.1	28	+200
+300	415.0 23	167.5 1.85 144	5.5 120.2 69	12.5 14.6 63	0.0 142 10	25.20	25	1.5	9	+300
400	1896.9 22	181.0 4.75 135	6.0 98.8 65	9.0 15.3 59	5.5 186 9	20.43	16	12.0	33	400
500	1188.2 20	7.0 0.74 126	6.5 77.8 61	5.5 16.4 55	1.5 167 8	15.05	6	22.5	12	500
600	479.4 19	20.5 3.82 118	7.0 57.2 56	2.0 17.9 52	7.5 8 8	10.87	32	6.9	38	600
700	1960.9 18	34.5 1.99 109	7.5 37.1 52	26.5 9.7 48	3.0 195 7	6.09	22	17.4	17	700
800	1251.8 16	48.5 0.24 100	8.0 17.4 48	23.0 12.0 44	9.0 36 7	1.31	12	1.8	43	800
900	542.5 15	62.0 3.59 91	8.0 169.1 44	19.5 14.7 40	5.0 20 6	28.66	32	12.3	22	900
1000	2023.6 13	76.0 2.02 82	8.5 150.2 39	16.0 17.7 36	1.0 4 5	23.88	22	22.8	1	1000
1100	1314.0 12	90.0 0.55 73	9.0 131.8 35	12.5 21.2 32	6.5 52 5	19.10	13	7.2	27	1100
1200	604.2 10	103.5 4.16 64	9.5 113.8 31	9.0 25.0 28	2.5 37 4	14.32	3	17.7	6	1200
1300	2084.8 9	117.5 2.86 55	10.0 96.2 26	5.5 29.2 24	8.0 87 4	9.54	28	2.2	32	1300
1400	1374.8 7	131.5 1.66 46	10.5 79.1 22	2.0 33.8 20	4.0 73 3	4.77	19	12.7	11	1400
1500	664.7 + 6	145.5 0.54 - 37	11.0 62.4 - 18	26.5 28.9 - 16	0.0 60 - 2	32.12	3	23.2	35	1500
Gregorian										Gregorian
1500	654.7 + 6	135.5 0.54 - 37	1.0 62.4 - 18	16.5 28.9 - 16	9.0 188 - 2	22.12	3	13.2	35	1500
1600	2134.9 4	149.0 4.52 28	1.5 46.1 13	13.0 34.3 12	5.0 175 2	17.34	29	23.7	14	1600
1700	1423.4 3	162.0 3.59 18	1.0 30.3 9	8.5 40.1 8	0.0 163 1	11.56	19	7.1	40	1700
1800	711.8 + 1	175.0 2.75 - 9	0.5 14.9 - 4	4.0 46.4 - 4	5.0 11 - 1	5.78	10	16.6	19	1800
1900	0.0 0	0.0 0.00 0	0.0 0.0 0	0.0 0.0 0	0.0 0 0	0.00	0	0.0	0	1900
2000	1479.6 - 2	13.5 4.34 + 9	0.0 156.5 + 5	24.0 50.0 + 4	5.5 54 + 1	27.35	20	10.5	24	2000
2100	767.5 3	26.5 3.78 19	14.5 96.5 9	20.0 4.5 8	0.5 44 1	21.57	10	20.0	3	2100
2200	55.3 5	39.5 3.31 28	14.0 82.9 14	15.5 12.4 12	5.0 99 2	15.79	0	3.4	29	2200
2300	1533.4 6	52.5 2.94 37	13.5 69.8 18	11.0 20.6 16	0.0 91 2	10.01	26	12.9	8	2300
2400	821.9 8	66.5 2.66 47	14.0 57.1 22	7.5 29.3 20	5.5 148 3	5.23	16	23.4	32	2400
2500	109.2 9	79.5 2.47 56	13.5 44.8 27	3.0 38.4 25	0.5 141 4	31.58	1	6.8	13	2500
2600	1586.9 11	92.5 2.38 66	13.0 33.0 32	26.5 37.9 29	5.0 198 4	25.80	26	16.4	37	2600
2700	873.9 12	105.5 2.38 75	12.5 21.7 37	22.0 47.8 33	0.0 192 5	20.03	17	25.9	16	2700
2800	161.7 14	119.5 2.47 85	13.0 10.9 41	19.0 5.2 37	6.0 46 6	15.25	7	10.3	42	2800
2900	1638.9 - 15	132.5 2.67 + 94	12.5 0.5 + 45	14.5 16.0 + 41	1.0 42 + 6	9.47	32	19.8	21	2900

CENTURY ADDITIONS TO ARGUMENTS.

TABLE 2 (cont.). Additions to the Arguments for the Centuries of the Julian and Gregorian Calendars.

Arg.	67	68	69	70	71 (a)		72 (a)		73 (a)		74 (a)		75	Arg.	
Julian	d	c	d	c	d	c	d	c	d	c	d	c	d	c	Julian
-2000	17.6	21	8.8	21	26.5	204.88 - 3017	11.5	75.30 + 1254	3.0	93.5 - 169	3.0	38.4 - 15	10.0	1	-2000
-1900	4.0	3	12.5	2	14.5	28.18 2946	16.5	64.64 1225	5.5	69.2 165	14.0	23.8 14	8.0	4	-1900
-1800	18.1	25	16.2	25	2.0	72.19 2874	21.5	53.69 1195	8.0	45.4 161	9.5	25.3 14	6.0	7	-1800
-1700	4.5	7	19.8	6	17.0	140.92 2802	26.5	42.44 1164	0.5	235.9 157	5.0	26.8 14	4.0	9	-1700
-1600	18.5	29	23.5	29	4.5	186.37 2729	31.5	30.88 1133	3.0	212.8 153	0.5	28.3 13	2.0	12	-1600
-1500	5.0	11	27.1	10	20.0	36.55 2656	4.5	60.01 1102	5.5	190.2 149	11.5	13.9 13	0.5	0	-1500
-1400	19.0	34	3.1	35	7.5	83.46 2583	9.5	47.84 1071	8.0	167.9 145	7.0	15.5 13	11.0	10	-1400
-1300	5.5	16	6.8	16	22.5	155.09 2510	14.5	35.35 1040	1.0	83.0 141	2.5	17.1 12	9.0	13	-1300
-1200	19.5	38	10.4	38	10.0	203.46 2436	19.5	22.55 1009	3.5	61.6 136	13.5	2.8 12	7.5	1	-1200
-1100	5.9	20	14.1	19	25.5	56.56 2362	24.5	9.44 978	6.0	40.5 132	9.0	4.5 12	5.5	4	-1100
-1000	20.0	0	17.7	0	13.0	106.41 2288	29.0	105.01 947	8.5	19.9 128	4.5	6.3 11	3.5	7	-1000
-900	6.4	24	21.4	23	0.5	157.00 2213	2.5	23.28 916	1.0	213.7 124	0.0	8.0 11	1.5	10	-900
-800	20.4	4	25.0	4	16.0	12.34 2138	7.5	9.25 885	3.5	193.9 120	10.5	6.8 11	12.5	6	-800
-700	6.9	28	1.0	29	3.5	64.44 2062	12.0	103.90 855	6.0	174.5 115	6.0	66.7 10	10.5	9	-700
-600	20.9	9	4.7	10	18.5	141.29 1986	17.0	89.25 824	8.5	155.5 111	1.5	68.6 10	8.5	12	-600
-500	7.3	33	8.3	33	6.0	194.90 1910	22.0	74.30 793	1.5	74.0 107	12.5	54.5 9	7.0	0	-500
-400	21.4	13	12.0	14	21.5	53.27 1833	27.0	59.03 762	4.0	56.0 102	8.0	56.4 9	5.0	3	-400
-300	7.8	37	15.6	36	9.0	108.40 1757	0.0	84.46 731	6.5	38.3 98	3.5	58.4 9	3.0	7	-300
-200	21.8	17	19.3	17	24.0	188.31 1680	5.0	68.57 700	9.0	21.1 94	14.5	44.4 8	1.0	10	-200
-100	8.3	41	22.9	40	12.0	24.98 1603	10.0	52.37 668	1.5	218.3 90	10.0	49.5 8	12.0	6	-100
0	22.3	21	26.6	21	27.0	106.42 1526	15.0	35.84 635	4.0	202.0 85	5.5	48.6 8	10.0	9	0
+ 100	8.8	4	2.6	4	14.5	164.63 1448	20.0	18.99 602	6.5	186.1 81	1.0	50.8 7	8.0	13	+ 100
200	22.8	26	6.2	27	2.5	3.62 1370	25.0	1.81 569	9.0	170.6 77	12.0	36.9 7	6.5	1	200
300	9.2	8	9.9	8	17.5	87.39 1202	29.5	93.30 536	2.0	92.5 72	7.5	39.1 6	4.5	5	300
400	23.2	30	13.5	31	5.0	147.93 1214	3.0	7.45 503	4.5	77.9 68	3.0	41.4 6	2.5	8	400
500	9.7	12	17.2	12	20.5	13.26 1136	7.5	98.28 470	7.0	63.7 64	14.0	27.7 6	0.5	12	500
600	23.7	34	20.8	34	8.0	75.37 1057	12.5	79.77 436	9.5	49.9 59	9.5	30.0 5	11.5	8	600
700	10.2	16	24.5	15	23.0	162.27 978	17.5	60.92 403	2.0	250.6 55	5.0	32.4 5	9.5	12	700
800	24.2	39	0.5	40	11.0	5.97 898	22.5	41.75 370	4.5	237.7 50	0.5	34.8 5	8.0	1	800
900	10.6	21	4.1	21	26.0	94.46 818	37.5	22.24 337	7.0	225.2 46	11.5	21.3 4	6.0	4	900
1000	24.7	1	7.8	2	13.5	159.75 737	0.5	43.41 304	0.0	150.2 41	7.0	23.8 4	4.0	8	1000
1100	11.1	25	11.4	25	1.5	5.85 656	5.5	23.25 271	2.5	138.7 37	2.5	26.3 3	2.0	12	1100
1200	25.1	5	13.1	6	16.5	96.76 575	10.5	2.76 238	5.0	127.6 32	13.5	12.9 3	0.5	1	1200
1300	11.6	29	18.8	29	4.0	164.49 494	15.0	90.41 205	7.5	117.0 28	9.0	15.5 3	11.0	13	1300
1400	25.6	9	22.4	10	19.5	37.02 412	20.0	69.80 172	0.5	43.8 23	4.5	18.1 2	9.5	2	1400
1500	12.1	33	20.1	32	7.0	106.38 - 330	25.0	48.32 + 138	3.0	34.2 - 18	0.0	20.8 - 2	7.5	6	1500
Gregorian															Gregorian
1500	2.1	33	16.1	32	24.5	130.38 - 330	15.0	48.32 + 138	2.5	97.2 - 18	5.5	4.8 - 2	10.0	14	1500
1600	16.1	14	19.7	13	12.0	200.55 248	20.0	26.50 104	5.0	87.9 14	1.0	7.5 1	8.5	3	1600
1700	1.5	38	22.4	36	26.5	75.54 105	24.0	4.35 70	6.5	79.2 9	10.5	65.3 - 1	5.5	7	1700
1800	14.6	18	25.0	17	13.0	147.36 - 83	27.5	90.85 + 35	8.0	70.9 - 5	5.0	68.1 0	2.5	11	1800
1900	0.0	0	0.0	0	0.0	0.00 0	0.0	0.00 0	0.0	0.0 0	0.0	0.0 0	0.0	0	1900
2000	14.0	22	3.7	23	15.0	97.47 + 83	4.5	85.80 - 35	2.0	269.6 + 5	10.5	57.8 0	10.5	12	2000
2100	27.0	2	6.3	4	1.5	171.76 166	8.5	62.25 71	3.5	262.7 9	5.0	60.8 + 1	8.0	1	2100
2200	12.5	26	9.0	27	16.0	50.89 249	12.5	38.34 106	5.0	256.2 14	15.0	47.8 1	5.0	6	2200
2300	25.5	7	11.6	8	2.5	126.85 333	16.5	14.08 142	6.5	250.2 18	9.5	50.9 2	2.0	10	2300
2400	12.0	31	15.3	30	18.0	7.64 417	21.0	98.47 177	9.0	244.6 23	5.0	54.0 2	0.0	14	2400
2500	25.0	11	18.0	11	4.5	85.28 502	25.0	73.50 213	1.0	176.5 28	15.0	41.1 3	10.0	12	2500
2600	10.4	35	20.6	34	18.5	187.77 587	29.0	48.17 248	2.5	171.9 33	9.5	44.2 3	7.5	1	2600
2700	23.5	15	23.3	15	5.5	47.11 672	1.0	63.49 283	4.0	167.8 37	4.0	47.4 3	4.5	6	2700
2800	9.9	39	26.9	38	20.5	151.30 758	6.0	37.47 318	6.5	164.1 42	15.0	34.7 4	2.5	10	2800
2900	22.9	19	1.9	21	7.5	12.35 + 844	10.0	11.09 - 353	8.0	160.9 + 47	9.5	38.0 + 4	12.5	8	2900

TABLE 2 (cont.). Additions to the Arguments for the Centuries of the Julian and Gregorian Calendars.

Arg.	76		77		78	<i>t</i>	79	80	81	82 (a)	83 (a)	84 (a)	Arg.
Julian	<i>d</i>	<i>c</i>	<i>d</i>	<i>c</i>	<i>d</i>	<i>d</i>	<i>c</i>	<i>c</i>	<i>c</i>	<i>d</i>	<i>d</i>	<i>d</i>	Julian
-2000	2.0	23.2 - 47	7.0	38.3 + 15	114.0	+50.60	31.95	55.10	40.34	3138 + 3	2932 + 8	2948 + 8	-2000
-1900	0.5	36.6 46	5.5	51.4 14	84.0	49.64	72.31	23.76	28.07	5074 3	5475 8	5491 8	-1900
-1800	6.5	6.1 45	4.0	64.3 14	54.5	48.67	39.67	65.44	15.81	1411 3	1219 8	1234 7	-1800
-1700	5.0	19.6 44	3.0	12.3 14	25.0	47.71	7.03	34.12	3.54	3948 3	3762 7	3776 7	-1700
-1600	3.5	33.3 43	1.5	25.2 13	112.5	46.74	47.39	2.78	64.28	6484 3	6305 7	6319 7	-1600
-1500	2.0	47.1 42	0.0	38.1 13	83.0	45.78	14.75	44.41	52.01	2220 3	2048 7	2061 7	-1500
-1400	1.0	2.0 41	8.5	62.0 13	53.5	44.82	55.11	13.02	39.75	4757 2	4591 7	4604 7	-1400
-1300	6.5	31.1 40	7.5	9.8 12	23.5	43.85	22.47	54.62	27.48	493 2	334 7	346 7	-1300
-1200	5.0	45.2 38	6.0	22.5 12	111.5	42.89	62.83	23.22	15.22	3029 2	2876 7	2888 7	-1200
-1100	4.0	0.5 37	4.5	35.3 12	82.0	41.92	30.19	64.84	2.95	5565 2	5419 7	5430 7	-1100
-1000	2.5	14.9 36	3.0	48.0 11	52.0	40.96	70.55	33.48	63.69	1301 2	1161 7	1172 7	-1000
-900	1.0	29.4 35	1.5	60.7 11	22.5	40.00	37.91	2.16	51.42	3837 2	3793 7	3714 6	-900
-800	7.0	0.0 34	0.5	8.3 10	110.5	39.03	5.27	43.84	39.16	6373 2	6246 7	6256 6	-800
-700	5.5	14.7 32	9.0	31.9 10	80.5	38.07	45.63	12.51	26.89	2109 2	1988 6	1997 6	-700
-600	4.0	29.6 31	7.5	44.4 10	51.0	37.10	12.99	54.16	14.63	4644 2	4530 6	4530 6	-600
-500	2.5	44.6 30	6.0	57.0 9	21.0	36.14	53.35	22.78	2.36	380 2	272 6	280 6	-500
-400	1.5	0.7 29	5.0	1.4 9	109.0	35.17	20.71	64.38	63.10	2915 2	2813 6	2822 6	-400
-300	0.0	15.9 28	3.5	16.9 9	79.5	34.21	61.07	32.97	50.83	5451 2	5355 6	5363 6	-300
-200	5.5	46.2 26	2.0	29.3 8	49.5	33.25	28.43	1.58	38.57	1186 2	1096 6	1104 5	-200
-100	4.5	2.7 25	0.5	41.7 8	20.0	32.28	68.79	43.22	26.30	3722 1	3637 5	3645 5	-100
0	3.0	18.3 24	9.5	0.0 7	108.0	31.32	36.15	11.88	14.04	6257 1	6178 5	6185 5	0
+ 100	1.5	34.0 23	8.0	12.3 7	78.0	30.35	3.51	53.56	1.77	1992 1	1919 5	1926 5	+ 100
200	0.0	49.8 22	6.5	24.6 7	48.5	29.39	43.87	22.24	62.51	4527 1	4460 5	4466 5	200
300	6.0	21.7 20	5.0	36.8 6	18.5	28.43	11.23	63.90	50.24	262 1	200 5	206 4	300
400	4.5	37.8 19	3.5	49.0 6	106.5	27.46	51.59	32.53	37.98	2797 1	2740 4	2745 4	400
500	3.0	54.0 18	2.0	61.1 6	76.5	26.50	18.96	1.13	25.71	5332 1	5280 4	5285 4	500
600	2.0	11.3 17	1.0	8.2 5	47.0	25.53	59.32	42.72	13.45	1067 1	1020 4	1024 4	600
700	0.5	27.8 15	9.5	31.3 5	17.5	24.57	26.68	11.33	1.18	3662 1	3560 4	3564 4	700
800	6.5	0.3 14	8.0	43.3 4	105.0	23.60	67.04	52.95	61.92	6137 1	6099 3	6103 3	800
900	5.0	17.0 13	6.5	55.3 4	75.5	22.64	34.40	21.60	49.65	1871 1	1838 3	1841 3	900
1000	3.5	33.9 12	5.5	2.3 4	45.5	21.68	1.76	63.28	37.30	4406 1	4377 3	4380 3	1000
1100	2.0	50.8 10	4.0	14.2 3	16.0	20.71	42.12	31.96	25.12	140 + I	115 3	118 3	1100
1200	1.0	8.9 9	2.5	26.0 3	103.5	19.75	9.48	0.63	12.86	2675 0	2653 2	2656 2	1200
1300	6.5	41.1 8	1.0	37.9 2	74.0	18.78	49.84	42.27	0.59	5209 0	5191 2	5194 2	1300
1400	5.0	58.4 6	9.5	60.7 2	44.0	17.82	17.20	10.88	61.33	943 0	929 2	931 2	1400
1500	4.0	16.9 - 5	8.5	7.4 + 2	14.5	+16.86	57.56	52.48	49.06	3477 0	3466 + 2	3468 + I	1500
Gregorian													Gregorian
1500	1.0	31.9 - 5	8.5	18.1 + 2	4.5	+ 6.86	57.56	52.48	49.06	3467 0	3456 + 2	3458 + I	1500
1600	7.0	5.5 4	7.0	30.1 + I	92.0	5.89	24.92	21.08	36.80	6001 0	5994 1	5995 1	1600
1700	4.5	32.2 3	4.5	41.8 + I	61.5	3.93	65.28	62.69	24.53	1734 0	1729 + I	1730 + I	1700
1800	2.0	41.0 - 1	2.0	53.4 0	30.5	+ 1.96	32.64	31.33	12.27	4207 0	4265 0	4265 0	1800
1900	0.0	0.0 0	0.0	0.0 0	0.0	0.00	0.00	0.00	0.00	0 0	0 0	0 0	1900
2000	5.5	33.1 + 1	8.5	22.5 0	88.0	- 0.96	40.36	41.68	60.73	2534 0	2535 0	2535 0	2000
2100	3.0	51.3 3	6.0	34.1 - 1	57.0	- 2.93	7.72	10.36	48.47	5066 0	5070 - 1	5070 - 1	2100
2200	1.0	10.7 4	3.5	45.5 1	26.5	- 4.89	48.08	52.01	30.20	799 0	804 1	804 1	2200
2300	5.5	44.2 5	1.0	57.0 2	113.0	- 6.86	15.44	20.63	23.94	3332 0	3338 1	3337 1	2300
2400	4.5	3.8 7	0.0	3.3 2	83.5	- 7.82	55.80	62.23	11.67	5805 0	5872 2	5871 2	2400
2500	2.0	24.6 8	7.5	25.7 2	52.5	- 9.78	23.16	30.83	72.41	1597 0	1605 2	1604 2	2500
2600	6.5	56.5 9	5.0	37.0 3	21.5	- 11.75	63.52	72.43	60.14	4130 - 1	4138 2	4130 2	2600
2700	4.5	16.6 11	2.5	48.2 3	108.5	- 13.71	30.88	41.06	47.88	6662 1	6670 3	6669 2	2700
2800	3.0	35.7 12	1.0	59.5 4	78.5	- 14.68	71.24	9.72	35.61	2395 1	2403 3	2402 2	2800
2900	0.5	55.0 + 13	9.0	16.6 - 4	48.0	- 16.64	38.60	51.40	23.35	4927 - 1	4935 - 3	4934 - 2	2900

TABLE 2 (concl.). Additions to L, - Ω, ω for the Centuries of the Julian and Gregorian Calendars.

Longitudes	L (Units of 0°01')	(a) (b)	- Ω (Units of 0°1')	(a) (b)	ω (Units of 1")	(a) (b)	Longitudes
Julian							Julian
-2000	167 13023	-52588 -73	598 0798	+5469 +9	194 972	+2694 +5	-2000
-1900	1275 02066	51315 73	1081 5301	5337 9	590 156	2630 5	-1900
-1800	1086 92382	50042 72	268 9673	5206 9	985 276	2566 5	-1800
-1700	898 83972	48767 71	752 3914	5074 9	84 331	2501 5	-1700
-1600	710 76838	47490 70	1235 8022	4942 8	479 322	2437 5	-1600
-1500	522 70983	46211 68	423 1999	4810 8	874 248	2372 5	-1500
-1400	334 66408	44928 65	906 5843	4677 8	1260 110	2307 4	-1400
-1300	146 63119	43640 62	93 9554	4544 8	367 906	2242 4	-1300
-1200	1254 61120	42346 59	577 3132	4410 7	762 637	2176 4	-1200
-1100	1066 60419	41045 56	1060 6875	4276 7	1157 302	2110 4	-1100
-1000	878 61022	39738 52	247 9883	4140 7	255 901	2044 4	-1000
-900	690 62037	38423 49	731 3056	4004 6	650 433	1977 4	-900
-800	502 66170	37101 46	1214 6092	3867 6	1044 898	1910 3	-800
-700	314 70727	35773 43	401 8901	3730 5	143 296	1842 3	-700
-600	126 76615	34441 41	885 1751	3592 5	537 627	1775 3	-600
-500	1234 83837	33104 40	72 4374	3453 5	931 890	1707 3	-500
-400	1046 92397	31765 39	555 6858	3314 5	30 084	1638 3	-400
-300	859 02298	30424 38	1038 9202	3174 5	424 210	1570 3	-300
-200	671 13540	29082 38	226 1407	3035 5	818 268	1502 3	-200
-100	483 26124	27739 37	709 3473	2895 5	1212 257	1433 3	-100
0	295 40052	26395 37	1192 5398	2755 4	310 177	1364 2	0
+ 100	107 55324	25050 36	379 7183	2615 4	704 028	1294 2	+ 100
200	1215 71942	23703 34	862 8828	2474 4	1097 810	1225 2	200
300	1027 89908	22353 32	50 0333	2334 4	195 522	1155 2	300
400	840 09228	20998 29	533 1696	2192 4	580 164	1085 2	400
500	652 29905	19637 26	1016 2917	2050 3	982 737	1015 2	500
600	464 51046	18269 22	203 3997	1908 3	80 239	945 2	600
700	276 75360	16894 18	686 4933	1764 3	473 670	874 2	700
800	89 00152	15511 14	1169 5725	1620 2	867 031	803 1	800
900	1197 26332	14120 10	356 6373	1475 2	1260 319	731 1	900
1000	1009 53906	12722 7	839 6876	1330 2	357 536	659 1	1000
1100	821 82881	11317 5	26 7233	1184 1	750 681	587 1	1100
1200	634 13263	9908 3	509 7444	1037 1	1143 754	514 1	1200
1300	446 45057	8495 2	992 7507	890 1	240 754	441 +1	1300
1400	258 78264	7081 1	179 7423	742 1	633 681	368 0	1400
1500	71 12886	-5664 -1	662 7192	+594 +1	1026 534	+295 0	1500
Gregorian							Gregorian
1500	892 77859	-5664 -1	660 8128	+594 +1	1022 524	+295 0	1500
1600	705 13898	4249 1	1143 7749	446 0	119 394	222 0	1600
1700	479 07849	2833 1	330 5314	297 0	511 610	148 0	1700
1800	235 03216	-1417 -1	813 2732	+149 0	903 842	+74 0	1800
1900	0	0 0	0	0 0	0	0 0	1900
2000	1108 41704	+1418 +2	482 9026	-149 0	392 485	-74 0	2000
2100	873 41325	2840 4	965 5996	299 0	784 494	149 0	2100
2200	638 42370	4265 7	152 2816	449 -1	1176 429	223 0	2200
2300	403 44843	5697 10	634 9486	599 1	272 289	299 0	2300
2400	215 92254	7136 14	1117 7912	751 1	664 475	374 -1	2400
2500	1276 97606	8583 18	304 4279	903 2	1056 184	450 1	2500
2600	1042 04408	10039 22	787 0494	1055 2	151 818	526 1	2600
2700	807 12671	11502 26	1269 6556	1209 2	543 375	602 1	2700
2800	619 65903	12074 29	456 4371	1363 3	935 256	679 1	2800
2900	384 77108	+14462 +32	939 0124	-1518 -3	30 660	-756 -2	2900

TABLE 3. Values of the Arguments for the beginnings of the years 1900 to 1950.

Arg.	D	1	2	3	4	5	6	7	8	9	10	Arg.
Period	<i>d</i> 29.530588	<i>c</i> 141	<i>c</i> 156	<i>c</i> 116	<i>c</i> 124	<i>c</i> 128	<i>c</i> 132	<i>c</i> 100	<i>c</i> 50	<i>c</i> 42	<i>c</i> 80	Period
Addition for Period of D	<i>c</i> 11.400	<i>c</i> 23.80	<i>c</i> 1.06	<i>c</i> 27.81	<i>c</i> 8.01	<i>c</i> 30.81	<i>c</i> 9.00	<i>c</i> 14.80	<i>c</i> 5.64	<i>c</i> 20.10	Addition for Period of D	
1900	14.2404	140.696	132.28	17.14	86.55	89.90	111.64	14.56	27.41	23.20	9.30	1900
1901	24.8733	136.491	105.87	29.86	48.28	58.02	85.30	22.54	5.00	6.88	10.49	1901
1902	5.9757	2.686	103.27	43.63	37.81	34.15	89.90	39.52	47.39	38.21	31.78	1902
1903	16.6086	139.481	76.86	56.35	123.53	2.27	63.62	47.50	24.99	21.89	32.97	1903
1904 B	28.2416	135.277	50.46	69.06	85.25	98.39	37.34	55.48	2.58	5.58	34.16	1904 B
1905	9.3439	1.471	47.86	82.84	74.78	74.53	41.87	72.45	44.97	36.90	55.45	1905
1906	19.9709	138.266	21.45	95.55	36.51	42.65	15.59	80.43	22.57	20.58	56.64	1906
1907	1.0792	4.461	18.85	109.33	26.04	18.78	20.12	97.41	14.96	9.91	77.93	1907
1908 B	12.7122	0.256	148.44	6.04	111.76	114.90	125.85	5.39	42.55	35.59	79.12	1908 B
1909	23.3451	137.052	122.04	18.76	73.48	83.02	99.57	13.37	20.15	19.27	0.31	1909
1910	4.4475	3.246	119.43	32.53	63.01	59.15	104.10	30.35	12.54	8.60	21.60	1910
1911	15.0804	140.042	93.03	45.25	24.74	27.28	77.82	38.33	40.13	34.28	22.79	1911
1912 B	26.7134	135.837	66.63	57.96	110.46	123.40	51.54	46.31	17.73	17.97	23.98	1912 B
1913	7.8157	2.031	64.02	71.74	99.99	99.53	56.07	63.28	10.12	7.29	45.27	1913
1914	18.4486	138.827	37.62	84.45	61.71	67.65	29.80	71.26	37.71	32.97	46.46	1914
1915	29.0816	134.622	11.21	97.17	23.44	35.77	3.52	79.24	15.31	16.66	47.65	1915
1916 B	11.1839	0.817	8.61	110.94	12.97	11.90	8.05	96.22	7.70	5.98	68.04	1916 B
1917	21.8169	137.612	138.20	7.66	98.69	108.02	113.77	4.20	35.20	31.66	70.13	1917
1918	2.9192	3.807	135.60	21.43	88.22	84.16	118.30	21.18	27.68	20.99	11.42	1918
1919	13.5522	140.602	109.20	34.15	49.94	52.28	92.02	29.16	5.28	4.67	12.61	1919
1920 B	23.1851	136.397	82.70	46.86	11.67	20.40	65.75	37.13	32.87	30.35	13.80	1920 B
1921	6.2875	2.592	80.19	60.64	1.20	124.53	70.28	54.11	25.26	19.68	35.09	1921
1922	16.9204	139.387	53.78	73.35	86.92	92.65	44.00	62.09	2.86	3.36	36.28	1922
1923	27.5534	135.182	27.38	86.07	48.64	60.77	17.72	70.07	30.45	29.05	37.47	1923
1924 B	9.6557	1.377	24.77	99.84	38.17	36.91	22.25	87.05	22.84	18.37	58.76	1924 B
1925	20.2887	138.172	154.37	112.56	123.90	5.03	127.97	95.03	0.44	2.05	59.95	1925
1926	1.3910	4.367	151.77	10.33	113.43	109.16	0.51	12.01	42.83	33.38	1.24	1926
1927	12.0240	0.162	125.36	23.05	75.15	77.28	106.23	19.98	20.43	17.06	2.43	1927
1928 B	23.6569	136.957	98.96	35.76	36.87	45.40	79.95	27.97	48.02	0.74	3.62	1928 B
1929	4.7593	3.152	96.35	49.54	26.40	21.53	84.48	44.94	40.41	32.07	24.91	1929
1930	15.3922	139.947	69.95	62.25	112.13	117.66	58.20	52.92	18.01	15.75	26.10	1930
1931	26.0251	135.742	43.54	74.97	73.85	85.78	31.92	60.90	45.60	41.44	27.29	1931
1932 B	8.1275	1.937	40.94	88.74	63.38	61.91	36.45	77.88	37.99	30.76	48.58	1932 B
1933	18.7604	138.732	14.54	101.46	25.10	30.03	10.18	85.86	15.59	14.44	49.77	1933
1934	29.3934	134.527	144.13	114.17	110.82	126.15	115.90	93.84	43.18	40.13	50.96	1934
1935	10.4957	0.722	141.53	11.95	100.36	102.28	120.43	10.81	35.57	29.45	72.25	1935
1936 B	22.1287	137.517	115.12	24.67	62.08	70.40	94.15	18.79	13.17	13.13	73.44	1936 B
1937	3.2310	3.712	112.52	38.44	51.61	46.54	98.68	35.77	5.56	2.46	14.73	1937
1938	13.8640	140.507	86.11	51.16	13.33	14.66	72.40	43.75	33.15	28.14	15.92	1938
1939	24.4909	136.302	59.71	63.87	99.06	110.78	46.13	51.73	10.75	11.83	17.11	1939
1940 B	6.5993	2.497	57.11	77.65	88.59	86.91	50.66	68.71	3.14	1.15	38.40	1940 B
1941	17.2322	139.292	30.70	90.36	50.31	55.03	24.38	76.09	30.73	26.83	39.59	1941
1942	27.8652	135.087	4.30	103.08	12.03	23.15	130.10	84.07	8.33	10.52	40.78	1942
1943	8.9675	1.282	1.69	0.85	1.56	127.29	2.63	1.64	0.72	41.84	62.07	1943
1944 B	20.6005	138.077	131.29	13.57	87.29	95.41	108.35	9.62	28.31	25.52	63.26	1944 B
1945	1.7028	4.272	128.68	27.34	76.82	71.54	112.89	26.60	20.71	14.85	4.55	1945
1946	12.3358	0.067	102.28	40.00	38.54	39.66	86.61	34.58	48.30	40.53	5.74	1946
1947	22.9687	136.862	75.88	52.77	0.26	7.78	60.33	42.56	25.89	24.21	6.93	1947
1948 B	5.0711	3.057	73.27	66.55	113.79	111.91	64.86	59.54	18.29	13.54	28.22	1948 B
1949	15.7040	139.852	46.87	79.26	75.52	80.04	38.58	67.51	45.88	39.22	29.41	1949
1950	20.3309	135.648	20.46	91.98	37.24	48.16	12.30	75.49	23.47	22.91	30.60	1950

TABLE 3 (cont.). Values of the Arguments for the beginnings of the years 1900 to 1950.

Arg.	11	12	13	14	15	16	17	18	19	20	21	22	Arg.
Period	<i>c</i> 44	<i>c</i> 24	<i>c</i> 44	<i>c</i> 32	<i>c</i> 28	<i>c</i> 251	<i>c</i> 51	<i>c</i> 38	<i>c</i> 76	<i>c</i> 94	<i>c</i> 56	<i>c</i> 36	Period
Addition for Period of D	<i>c</i> 3'94	<i>c</i> 7'75	<i>c</i> 7'90	<i>c</i> 5'16	<i>c</i> 0'50	<i>c</i> 18'000	<i>c</i> 8'69	<i>c</i> 9'20	<i>c</i> 7'50	<i>c</i> 29'50	<i>c</i> 1'51	<i>c</i> 13'88	Addition for Period of D
1900	<i>c</i> 5'30	<i>c</i> 23'19	<i>c</i> 11'71	<i>c</i> 31'06	<i>c</i> 7'57	<i>c</i> 213'372	<i>c</i> 6'04	<i>c</i> 36'80	<i>c</i> 20'39	<i>c</i> 76'94	<i>c</i> 23'42	<i>c</i> 24'07	1900
1901	<i>c</i> 8'58	<i>c</i> 20'20	<i>c</i> 18'50	<i>c</i> 28'08	<i>c</i> 13'56	<i>c</i> 178'373	<i>c</i> 8'32	<i>c</i> 33'20	<i>c</i> 34'38	<i>c</i> 54'93	<i>c</i> 41'54	<i>c</i> 10'62	1901
1902	<i>c</i> 15'80	<i>c</i> 0'96	<i>c</i> 33'19	<i>c</i> 0'06	<i>c</i> 20'05	<i>c</i> 161'375	<i>c</i> 19'29	<i>c</i> 0'80	<i>c</i> 55'88	<i>c</i> 62'42	<i>c</i> 5'17	<i>c</i> 11'05	1902
1903	<i>c</i> 19'08	<i>c</i> 21'97	<i>c</i> 39'98	<i>c</i> 29'99	<i>c</i> 26'04	<i>c</i> 126'377	<i>c</i> 21'56	<i>c</i> 35'20	<i>c</i> 69'87	<i>c</i> 40'40	<i>c</i> 23'89	<i>c</i> 33'60	1903
1904 B	<i>c</i> 22'36	<i>c</i> 18'98	<i>c</i> 2'77	<i>c</i> 27'91	<i>c</i> 4'03	<i>c</i> 91'378	<i>c</i> 23'84	<i>c</i> 31'60	<i>c</i> 7'86	<i>c</i> 18'39	<i>c</i> 41'41	<i>c</i> 20'15	1904 B
1905	<i>c</i> 29'58	<i>c</i> 23'75	<i>c</i> 17'46	<i>c</i> 30'99	<i>c</i> 10'52	<i>c</i> 74'380	<i>c</i> 34'81	<i>c</i> 37'20	<i>c</i> 29'36	<i>c</i> 25'88	<i>c</i> 5'04	<i>c</i> 20'58	1905
1906	<i>c</i> 32'86	<i>c</i> 20'76	<i>c</i> 24'25	<i>c</i> 28'92	<i>c</i> 16'51	<i>c</i> 39'381	<i>c</i> 37'09	<i>c</i> 33'60	<i>c</i> 43'35	<i>c</i> 3'87	<i>c</i> 23'16	<i>c</i> 7'13	1906
1907	<i>c</i> 40'07	<i>c</i> 1'52	<i>c</i> 38'94	<i>c</i> 0'00	<i>c</i> 23'00	<i>c</i> 22'383	<i>c</i> 48'06	<i>c</i> 1'20	<i>c</i> 64'85	<i>c</i> 11'35	<i>c</i> 42'79	<i>c</i> 7'56	1907
1908 B	<i>c</i> 43'35	<i>c</i> 22'53	<i>c</i> 1'72	<i>c</i> 29'92	<i>c</i> 1'00	<i>c</i> 238'384	<i>c</i> 50'34	<i>c</i> 35'60	<i>c</i> 2'84	<i>c</i> 83'34	<i>c</i> 4'91	<i>c</i> 30'11	1908 B
1909	<i>c</i> 2'63	<i>c</i> 19'54	<i>c</i> 8'51	<i>c</i> 27'84	<i>c</i> 6'99	<i>c</i> 203'386	<i>c</i> 1'62	<i>c</i> 32'00	<i>c</i> 16'84	<i>c</i> 61'33	<i>c</i> 23'03	<i>c</i> 16'66	1909
1910	<i>c</i> 9'85	<i>c</i> 0'30	<i>c</i> 23'20	<i>c</i> 30'93	<i>c</i> 13'48	<i>c</i> 186'388	<i>c</i> 12'59	<i>c</i> 37'60	<i>c</i> 38'33	<i>c</i> 68'82	<i>c</i> 42'66	<i>c</i> 17'09	1910
1911	<i>c</i> 13'13	<i>c</i> 21'31	<i>c</i> 29'99	<i>c</i> 28'85	<i>c</i> 19'47	<i>c</i> 151'389	<i>c</i> 14'87	<i>c</i> 34'00	<i>c</i> 52'32	<i>c</i> 46'80	<i>c</i> 4'78	<i>c</i> 3'64	1911
1912 B	<i>c</i> 16'41	<i>c</i> 18'32	<i>c</i> 36'78	<i>c</i> 26'77	<i>c</i> 25'46	<i>c</i> 116'391	<i>c</i> 17'15	<i>c</i> 30'40	<i>c</i> 66'32	<i>c</i> 24'79	<i>c</i> 22'90	<i>c</i> 26'19	1912 B
1913	<i>c</i> 23'63	<i>c</i> 23'08	<i>c</i> 7'47	<i>c</i> 29'86	<i>c</i> 3'95	<i>c</i> 99'393	<i>c</i> 28'12	<i>c</i> 36'00	<i>c</i> 11'81	<i>c</i> 32'28	<i>c</i> 42'53	<i>c</i> 26'62	1913
1914	<i>c</i> 26'91	<i>c</i> 20'09	<i>c</i> 14'26	<i>c</i> 27'78	<i>c</i> 9'94	<i>c</i> 64'394	<i>c</i> 30'40	<i>c</i> 32'40	<i>c</i> 25'81	<i>c</i> 10'27	<i>c</i> 4'65	<i>c</i> 13'17	1914
1915	<i>c</i> 30'19	<i>c</i> 17'10	<i>c</i> 21'05	<i>c</i> 25'70	<i>c</i> 15'93	<i>c</i> 29'396	<i>c</i> 32'68	<i>c</i> 28'80	<i>c</i> 39'80	<i>c</i> 82'25	<i>c</i> 22'77	<i>c</i> 35'72	1915
1916 B	<i>c</i> 37'40	<i>c</i> 21'87	<i>c</i> 35'74	<i>c</i> 28'78	<i>c</i> 22'42	<i>c</i> 12'397	<i>c</i> 43'65	<i>c</i> 34'40	<i>c</i> 61'29	<i>c</i> 89'74	<i>c</i> 42'40	<i>c</i> 0'15	1916 B
1917	<i>c</i> 40'68	<i>c</i> 18'88	<i>c</i> 42'33	<i>c</i> 26'71	<i>c</i> 0'41	<i>c</i> 228'399	<i>c</i> 45'93	<i>c</i> 30'80	<i>c</i> 75'20	<i>c</i> 67'73	<i>c</i> 4'52	<i>c</i> 22'70	1917
1918	<i>c</i> 3'90	<i>c</i> 23'64	<i>c</i> 13'22	<i>c</i> 29'79	<i>c</i> 6'90	<i>c</i> 211'401	<i>c</i> 5'90	<i>c</i> 36'40	<i>c</i> 20'78	<i>c</i> 75'22	<i>c</i> 24'15	<i>c</i> 23'13	1918
1919	<i>c</i> 7'18	<i>c</i> 20'65	<i>c</i> 20'01	<i>c</i> 27'71	<i>c</i> 12'89	<i>c</i> 176'402	<i>c</i> 8'18	<i>c</i> 32'80	<i>c</i> 34'78	<i>c</i> 53'20	<i>c</i> 42'27	<i>c</i> 9'68	1919
1920 B	<i>c</i> 10'46	<i>c</i> 17'66	<i>c</i> 26'80	<i>c</i> 25'64	<i>c</i> 18'88	<i>c</i> 141'404	<i>c</i> 10'46	<i>c</i> 29'20	<i>c</i> 48'77	<i>c</i> 31'19	<i>c</i> 4'39	<i>c</i> 32'23	1920 B
1921	<i>c</i> 17'68	<i>c</i> 22'42	<i>c</i> 41'49	<i>c</i> 28'72	<i>c</i> 25'37	<i>c</i> 124'406	<i>c</i> 21'43	<i>c</i> 34'80	<i>c</i> 70'27	<i>c</i> 38'68	<i>c</i> 24'02	<i>c</i> 32'66	1921
1922	<i>c</i> 20'96	<i>c</i> 19'43	<i>c</i> 4'28	<i>c</i> 26'64	<i>c</i> 3'36	<i>c</i> 89'407	<i>c</i> 23'71	<i>c</i> 31'20	<i>c</i> 8'26	<i>c</i> 16'67	<i>c</i> 42'14	<i>c</i> 19'21	1922
1923	<i>c</i> 24'24	<i>c</i> 16'44	<i>c</i> 11'07	<i>c</i> 24'56	<i>c</i> 9'35	<i>c</i> 54'409	<i>c</i> 25'99	<i>c</i> 27'60	<i>c</i> 22'25	<i>c</i> 88'65	<i>c</i> 4'20	<i>c</i> 5'76	1923
1924 B	<i>c</i> 31'46	<i>c</i> 21'20	<i>c</i> 25'76	<i>c</i> 27'65	<i>c</i> 15'84	<i>c</i> 37'410	<i>c</i> 36'96	<i>c</i> 33'20	<i>c</i> 43'75	<i>c</i> 2'14	<i>c</i> 23'89	<i>c</i> 6'19	1924 B
1925	<i>c</i> 34'74	<i>c</i> 18'21	<i>c</i> 32'55	<i>c</i> 25'57	<i>c</i> 21'84	<i>c</i> 2'412	<i>c</i> 39'24	<i>c</i> 29'60	<i>c</i> 57'74	<i>c</i> 74'13	<i>c</i> 42'01	<i>c</i> 28'74	1925
1926	<i>c</i> 41'95	<i>c</i> 22'98	<i>c</i> 3'24	<i>c</i> 28'65	<i>c</i> 0'33	<i>c</i> 236'414	<i>c</i> 50'21	<i>c</i> 35'20	<i>c</i> 3'24	<i>c</i> 81'62	<i>c</i> 5'64	<i>c</i> 29'16	1926
1927	<i>c</i> 1'23	<i>c</i> 19'99	<i>c</i> 10'03	<i>c</i> 26'58	<i>c</i> 6'32	<i>c</i> 201'415	<i>c</i> 1'49	<i>c</i> 31'60	<i>c</i> 17'23	<i>c</i> 59'60	<i>c</i> 23'70	<i>c</i> 15'71	1927
1928 B	<i>c</i> 4'51	<i>c</i> 17'00	<i>c</i> 16'82	<i>c</i> 24'50	<i>c</i> 12'31	<i>c</i> 166'417	<i>c</i> 3'77	<i>c</i> 28'00	<i>c</i> 31'23	<i>c</i> 37'59	<i>c</i> 41'88	<i>c</i> 2'26	1928 B
1929	<i>c</i> 11'73	<i>c</i> 21'76	<i>c</i> 31'50	<i>c</i> 27'58	<i>c</i> 18'80	<i>c</i> 149'419	<i>c</i> 14'74	<i>c</i> 33'60	<i>c</i> 55'72	<i>c</i> 45'08	<i>c</i> 5'51	<i>c</i> 2'69	1929
1930	<i>c</i> 15'01	<i>c</i> 18'77	<i>c</i> 38'29	<i>c</i> 25'50	<i>c</i> 24'79	<i>c</i> 114'420	<i>c</i> 17'02	<i>c</i> 30'00	<i>c</i> 66'71	<i>c</i> 23'07	<i>c</i> 23'63	<i>c</i> 25'24	1930
1931	<i>c</i> 18'29	<i>c</i> 15'78	<i>c</i> 1'08	<i>c</i> 23'43	<i>c</i> 2'78	<i>c</i> 79'422	<i>c</i> 19'30	<i>c</i> 26'40	<i>c</i> 4'71	<i>c</i> 1'05	<i>c</i> 41'75	<i>c</i> 11'79	1931
1932 B	<i>c</i> 25'51	<i>c</i> 20'54	<i>c</i> 15'77	<i>c</i> 26'51	<i>c</i> 9'27	<i>c</i> 62'423	<i>c</i> 30'27	<i>c</i> 32'00	<i>c</i> 26'20	<i>c</i> 8'54	<i>c</i> 5'38	<i>c</i> 12'22	1932 B
1933	<i>c</i> 28'79	<i>c</i> 17'55	<i>c</i> 22'56	<i>c</i> 24'43	<i>c</i> 15'26	<i>c</i> 27'425	<i>c</i> 32'55	<i>c</i> 28'40	<i>c</i> 40'20	<i>c</i> 80'53	<i>c</i> 23'50	<i>c</i> 34'77	1933
1934	<i>c</i> 32'07	<i>c</i> 14'56	<i>c</i> 29'35	<i>c</i> 22'35	<i>c</i> 21'25	<i>c</i> 243'427	<i>c</i> 34'83	<i>c</i> 24'80	<i>c</i> 54'19	<i>c</i> 58'52	<i>c</i> 41'62	<i>c</i> 21'32	1934
1935	<i>c</i> 39'28	<i>c</i> 19'32	<i>c</i> 0'04	<i>c</i> 25'44	<i>c</i> 27'74	<i>c</i> 226'428	<i>c</i> 45'80	<i>c</i> 30'40	<i>c</i> 75'68	<i>c</i> 66'00	<i>c</i> 5'25	<i>c</i> 21'75	1935
1936 B	<i>c</i> 42'56	<i>c</i> 16'34	<i>c</i> 6'83	<i>c</i> 23'36	<i>c</i> 5'73	<i>c</i> 191'430	<i>c</i> 48'08	<i>c</i> 26'80	<i>c</i> 13'68	<i>c</i> 43'99	<i>c</i> 23'37	<i>c</i> 8'30	1936 B
1937	<i>c</i> 5'78	<i>c</i> 21'10	<i>c</i> 21'52	<i>c</i> 26'44	<i>c</i> 12'22	<i>c</i> 174'432	<i>c</i> 8'04	<i>c</i> 32'40	<i>c</i> 35'17	<i>c</i> 51'48	<i>c</i> 43'00	<i>c</i> 8'73	1937
1938	<i>c</i> 9'06	<i>c</i> 18'11	<i>c</i> 28'31	<i>c</i> 24'37	<i>c</i> 18'21	<i>c</i> 139'433	<i>c</i> 10'32	<i>c</i> 28'80	<i>c</i> 49'17	<i>c</i> 29'47	<i>c</i> 5'12	<i>c</i> 31'28	1938
1939	<i>c</i> 12'34	<i>c</i> 15'12	<i>c</i> 35'10	<i>c</i> 22'29	<i>c</i> 24'20	<i>c</i> 104'435	<i>c</i> 12'60	<i>c</i> 25'20	<i>c</i> 63'16	<i>c</i> 7'45	<i>c</i> 23'24	<i>c</i> 17'83	1939
1940 B	<i>c</i> 19'56	<i>c</i> 10'88	<i>c</i> 5'79	<i>c</i> 25'37	<i>c</i> 2'60	<i>c</i> 87'437	<i>c</i> 23'57	<i>c</i> 30'80	<i>c</i> 8'66	<i>c</i> 14'94	<i>c</i> 42'87	<i>c</i> 18'26	1940 B
1941	<i>c</i> 22'84	<i>c</i> 16'89	<i>c</i> 12'58	<i>c</i> 23'29	<i>c</i> 8'68	<i>c</i> 52'438	<i>c</i> 25'85	<i>c</i> 27'20	<i>c</i> 22'65	<i>c</i> 86'93	<i>c</i> 4'99	<i>c</i> 4'81	1941
1942	<i>c</i> 26'12	<i>c</i> 13'90	<i>c</i> 19'37	<i>c</i> 21'22	<i>c</i> 14'67	<i>c</i> 17'440	<i>c</i> 28'13	<i>c</i> 23'60	<i>c</i> 36'64	<i>c</i> 64'92	<i>c</i> 23'11	<i>c</i> 27'36	1942
1943	<i>c</i> 33'34	<i>c</i> 18'66	<i>c</i> 34'05	<i>c</i> 24'30	<i>c</i> 21'16	<i>c</i> 0'442	<i>c</i> 39'10	<i>c</i> 29'20	<i>c</i> 58'14	<i>c</i> 72'40	<i>c</i> 42'74	<i>c</i> 27'79	1943
1944 B	<i>c</i> 36'61	<i>c</i> 15'67	<i>c</i> 40'85	<i>c</i> 22'22	<i>c</i> 27'16	<i>c</i> 216'443	<i>c</i> 41'38	<i>c</i> 25'60	<i>c</i> 72'13	<i>c</i> 50'39	<i>c</i> 4'86	<i>c</i> 14'34	1944 B
1945	<i>c</i> 43'83	<i>c</i> 20'43	<i>c</i> 11'54	<i>c</i> 25'31	<i>c</i> 5'65	<i>c</i> 109'445	<i>c</i> 1'35	<i>c</i> 31'20	<i>c</i> 17'63	<i>c</i> 57'88	<i>c</i> 24'49	<i>c</i> 14'77	1945
1946	<i>c</i> 3'11	<i>c</i> 17'45	<i>c</i> 18'33	<i>c</i> 23'23	<i>c</i> 11'64	<i>c</i> 164'446	<i>c</i> 3'63	<i>c</i> 27'60	<i>c</i> 31'62	<i>c</i> 35'87	<i>c</i> 42'61	<i>c</i> 1'32	1946
1947	<i>c</i> 6'39	<i>c</i> 14'46	<i>c</i> 25'12	<i>c</i> 21'15	<i>c</i> 17'63	<i>c</i> 129'448	<i>c</i> 5'91	<i>c</i> 24'00	<i>c</i> 45'61	<i>c</i> 13'85	<i>c</i> 4'73	<i>c</i> 23'87	1947
1948 B	<i>c</i> 13'61	<i>c</i> 19'22	<i>c</i> 39'81	<i>c</i> 24'23	<i>c</i> 24'12	<i>c</i> 112'450	<i>c</i> 16'88	<i>c</i> 29'60	<i>c</i> 67'11	<i>c</i> 21'34	<i>c</i> 24'36	<i>c</i> 24'30	1948 B
1949	<i>c</i> 16'89	<i>c</i> 16'23	<i>c</i> 2'60	<i>c</i> 22'16	<i>c</i> 2'11	<i>c</i> 77'451	<i>c</i> 19'16	<i>c</i> 26'00	<i>c</i> 5'10	<i>c</i> 93'33	<i>c</i> 42'48	<i>c</i> 10'85	1949
1950	<i>c</i> 20'17	<i>c</i> 13'24	<i>c</i> 9'39	<i>c</i> 20'08	<i>c</i> 8'10	<i>c</i> 42'453	<i>c</i> 21'44	<i>c</i> 22'40	<i>c</i> 19'10	<i>c</i> 71'32	<i>c</i> 4'60	<i>c</i> 33'40	1950

TABLE 3 (cont.). Values of the Arguments for the beginnings of the years 1900 to 1950.

Arg.	23		24		25		26		27		28		29		30		(a)	Arg.
Period	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c		Period
Half day	599 ^c		167 ^c		189 ^c		142 ^c		258 ^c		178 ^c		207 ^c		330 ^c			Half day
	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c		
1900	10.5	376.4	2.5	86.1	1.5	94.3	17.0	53.10	30.5	90.3	5.0	66.5	10.5	157.4	22.5	107.596	-44	1900
1901	6.5	22.4	12.5	156.1	8.0	17.3	24.5	15.17	12.0	185.3	4.5	129.5	24.5	91.4	1.5	263.552	44	1901
1902	2.0	267.4	8.5	162.2	14.0	129.3	2.0	33.14	28.5	201.4	4.5	14.5	9.0	123.4	8.5	125.508	44	1902
1903	13.0	377.4	5.0	1.2	20.5	52.3	9.0	137.12	10.5	38.4	4.0	77.6	23.0	57.4	13.0	317.464	44	1903
1904 B	10.0	23.4	2.0	7.3	2.0	118.3	17.5	99.10	28.0	54.4	4.5	140.6	8.5	89.5	23.0	179.421	44	1904 B
1905	5.5	268.4	12.0	77.3	8.5	41.3	25.0	61.07	9.5	149.4	4.5	25.6	22.5	23.5	2.5	5.377	44	1905
1906	1.0	513.4	8.0	83.4	14.5	153.3	2.5	79.05	26.0	165.4	4.0	88.7	7.0	55.5	9.0	197.333	44	1906
1907	12.5	24.4	4.0	89.4	21.0	76.3	10.0	41.03	8.0	2.5	3.5	151.7	20.5	196.5	16.0	59.290	43	1907
1908 B	9.0	269.4	1.0	95.5	2.5	142.3	18.5	3.01	25.5	18.5	4.5	36.7	6.5	21.5	23.5	251.247	43	1908 B
1909	4.5	514.4	11.0	165.5	9.0	65.3	25.5	106.98	7.0	113.5	4.0	99.8	20.0	162.6	3.0	77.204	43	1909
1910	0.5	160.4	7.5	4.6	15.0	177.3	3.0	124.96	23.5	129.5	3.5	162.8	4.5	194.6	9.5	269.161	43	1910
1911	11.5	270.4	3.5	10.6	21.5	100.3	10.5	86.94	5.0	224.5	3.5	47.8	18.5	128.6	16.5	131.118	43	1911
1912 B	8.0	515.4	0.5	16.7	3.0	166.3	19.0	48.92	22.5	240.5	4.0	110.9	4.0	160.6	24.0	323.075	43	1912 B
1913	4.0	161.4	10.5	86.7	9.5	89.3	26.5	10.89	4.5	77.6	3.5	173.9	18.0	94.6	3.5	149.032	43	1913
1914	15.0	271.4	6.5	92.8	16.0	12.2	4.0	28.87	21.0	93.6	3.5	58.9	2.5	126.6	10.5	10.999	43	1914
1915	10.5	516.4	2.5	98.8	22.0	124.2	11.0	132.85	2.5	188.6	3.0	122.0	16.5	60.7	17.0	202.947	42	1915
1916 B	7.5	162.3	14.0	1.9	4.0	1.2	19.5	94.83	20.0	204.6	4.0	7.0	2.0	92.7	25.0	64.905	42	1916 B
1917	3.0	407.3	10.0	7.9	10.0	113.2	27.0	56.81	2.0	41.6	3.5	70.0	16.0	26.7	4.0	220.863	42	1917
1918	14.0	517.3	6.0	14.0	16.5	36.2	4.5	74.78	18.5	57.6	3.0	133.1	0.5	58.7	11.0	82.821	42	1918
1919	10.0	163.3	2.0	20.0	22.5	148.2	12.0	36.76	0.0	152.7	3.0	18.1	14.0	199.7	17.5	274.779	42	1919
1920 B	6.5	408.3	13.0	90.1	4.5	25.2	20.0	140.74	17.5	168.7	3.5	81.1	0.0	24.8	25.5	136.737	42	1920 B
1921	2.5	54.3	9.0	96.1	10.5	137.2	27.5	102.72	34.0	184.7	3.0	144.2	13.5	165.8	4.5	292.695	42	1921
1922	13.5	104.3	5.0	102.2	17.0	60.2	5.0	120.69	16.0	21.7	3.0	20.2	27.5	99.8	11.5	154.654	41	1922
1923	9.0	409.3	1.0	108.2	23.0	172.2	12.5	82.67	32.5	37.7	2.5	92.2	12.0	131.8	18.5	16.612	41	1923
1924 B	6.0	55.3	12.5	11.3	5.0	49.2	21.0	44.65	15.0	132.8	3.0	155.3	27.0	65.8	26.0	208.571	41	1924 B
1925	1.5	300.3	8.5	17.3	11.0	161.2	28.5	6.03	31.5	148.8	3.0	40.3	11.5	97.8	5.5	34.530	41	1925
1926	12.5	410.3	4.5	23.4	17.5	84.2	6.0	24.61	13.0	243.8	2.5	103.3	25.5	31.9	12.0	226.480	41	1926
1927	8.5	56.3	0.5	29.4	24.0	7.2	13.0	128.59	30.0	1.8	2.0	160.4	10.0	63.9	19.0	88.448	41	1927
1928 B	5.0	301.3	11.5	99.5	5.5	73.2	21.5	90.57	12.5	96.8	3.0	51.4	24.5	204.9	26.5	280.407	41	1928 B
1929	0.5	546.3	7.5	105.5	11.5	185.1	29.0	52.55	29.0	112.8	2.5	114.4	9.5	29.9	6.0	106.366	41	1929
1930	12.0	57.3	3.5	111.6	18.0	108.1	6.5	70.52	10.5	207.9	2.0	177.5	23.0	170.9	12.5	298.326	40	1930
1931	7.5	302.3	14.0	14.6	24.5	31.1	14.0	32.50	27.0	223.9	2.0	62.5	7.5	202.9	19.5	160.286	40	1931
1932 B	4.0	547.3	11.0	20.7	6.0	97.1	22.0	136.48	10.0	60.9	2.5	125.5	22.5	137.0	27.5	22.245	40	1932 B
1933	0.0	193.3	7.0	26.7	12.5	20.1	0.0	12.46	26.5	76.9	2.5	10.6	7.0	169.0	6.5	178.205	40	1933
1934	11.0	303.3	3.0	32.8	18.5	132.1	7.0	116.44	8.0	171.9	2.0	73.6	21.0	103.0	13.5	40.165	40	1934
1935	6.5	548.2	13.0	102.8	25.0	55.1	14.5	78.42	24.5	187.9	1.5	136.6	5.5	135.0	20.0	232.125	40	1935
1936 B	3.5	194.2	10.0	108.9	6.5	121.1	23.0	40.40	7.5	25.0	2.5	21.7	20.5	69.0	0.5	58.085	40	1936 B
1937	14.5	304.2	6.0	114.9	13.0	44.1	0.5	58.37	24.0	41.0	2.0	84.7	5.0	101.1	7.0	250.046	40	1937
1938	10.0	509.2	2.0	121.0	19.0	156.1	8.0	20.35	5.5	136.0	1.5	147.7	19.0	35.1	14.0	112.006	39	1938
1939	6.0	195.2	12.5	24.0	0.0	33.1	15.0	124.33	22.0	152.0	1.5	32.8	3.5	67.1	20.5	303.967	39	1939
1940 B	2.5	440.2	9.5	30.1	7.0	145.1	23.5	86.31	4.5	247.0	2.0	95.8	18.5	1.1	1.0	129.927	39	1940 B
1941	13.5	550.2	5.5	36.1	13.5	68.1	1.0	104.29	21.5	5.0	1.5	158.8	3.0	33.1	7.5	321.888	39	1941
1942	9.5	196.2	1.5	42.2	19.5	180.1	8.5	66.27	3.0	100.0	1.5	43.9	16.5	174.1	14.5	183.849	39	1942
1943	5.0	441.2	11.5	112.2	0.5	57.1	16.0	28.25	19.5	116.1	1.0	106.9	1.0	206.2	21.5	45.810	39	1943
1944 B	2.0	87.2	8.5	118.3	7.5	169.1	24.0	132.23	2.0	211.1	1.5	169.9	16.0	140.2	1.5	201.771	39	1944 B
1945	13.0	197.2	4.5	124.4	14.0	92.1	2.0	8.21	18.5	227.1	1.5	55.0	0.5	172.2	8.5	63.732	39	1945
1946	8.5	442.2	0.5	130.4	20.5	15.1	9.0	112.19	0.5	64.1	1.0	118.0	14.5	106.2	15.0	255.694	38	1946
1947	4.5	88.2	11.0	33.5	1.0	81.1	16.5	74.17	17.0	80.1	1.0	3.0	28.5	40.2	22.0	117.655	38	1947
1948 B	1.0	333.2	8.0	39.5	8.5	4.0	25.0	36.15	34.5	96.1	1.5	66.1	14.0	72.2	2.0	273.617	38	1948 B
1949	12.0	443.2	4.0	45.0	14.5	116.0	2.5	54.13	16.0	191.2	1.0	129.1	28.0	6.3	9.0	135.579	38	1949
1950	8.0	89.2	21.0	51.6	21.0	39.0	10.0	10.11	32.5	207.2	1.0	14.1	12.5	38.3	15.5	327.541	-38	1950

TABLE 3 (cont.). Values of the Arguments for the beginnings of the years 1900 to 1950.

Arg.	31 (a)		32		33 (a)		34		35		36		37		38		Arg.
Period	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	Period
Half day	294		335		98		14		277		117		396		299		Half day
	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	
1900	10.0	183.13 + 18	27.5	243.57	28.5	52.64 + 6	194.5	10.45	5.0	5.30	0.0	7.7	8.0	250.0	2.0	268.4	1900
1901	6.0	105.31 18	11.0	80.58	9.5	72.70 6	148.0	2.47	4.5	104.31	15.0	23.8	0.0	147.0	3.5	279.3	1901
1902	2.0	27.48 18	26.0	126.59	20.5	0.76 6	101.0	8.50	4.0	203.33	14.0	61.9	2.0	110.9	5.0	290.3	1902
1903	12.5	105.66 18	9.0	298.60	1.5	20.82 6	54.5	0.52	4.0	25.34	13.0	99.9	4.0	74.9	7.0	2.2	1903
1904 B	9.5	27.84 18	25.5	9.62	13.0	46.88 6	8.5	6.55	4.5	124.35	13.5	21.0	7.0	38.9	2.0	236.2	1904 B
1905	5.0	244.01 18	8.5	181.63	23.5	72.93 6	167.5	9.58	4.0	223.37	12.5	59.1	9.0	2.8	3.5	247.1	1905
1906	1.0	166.19 18	23.5	227.64	4.5	92.99 6	121.0	1.60	4.0	45.38	11.5	97.1	2.5	295.8	5.0	258.1	1906
1907	11.5	244.36 18	7.0	64.65	15.5	21.05 6	74.0	7.63	3.5	144.40	11.0	18.2	0.5	259.8	6.5	269.0	1907
1908 B	8.5	166.54 18	23.0	110.66	27.0	47.11 6	28.0	13.65	4.0	243.41	11.0	56.3	5.5	223.7	2.0	204.0	1908 B
1909	4.5	88.71 18	6.0	282.67	8.0	67.17 6	187.5	2.68	4.0	65.43	10.0	94.7	7.5	187.7	3.5	214.9	1909
1910	0.5	10.89 18	21.0	328.69	18.5	93.22 6	149.5	8.70	3.5	164.44	9.5	15.4	9.5	151.7	5.0	225.8	1910
1911	11.0	89.06 18	4.5	165.70	0.0	15.28 6	94.0	0.73	3.0	263.45	8.5	53.5	1.5	48.6	6.5	236.8	1911
1912 B	8.0	11.24 18	20.5	211.71	11.5	41.34 6	48.0	6.76	4.0	85.47	8.5	91.6	4.5	12.6	2.0	171.7	1912 B
1913	3.5	227.41 18	4.0	48.72	22.0	67.40 6	1.0	12.78	3.5	184.48	8.0	12.7	6.0	372.5	3.5	182.7	1913
1914	14.5	11.59 18	19.0	94.73	3.0	87.46 6	160.5	1.81	3.5	6.50	7.0	50.7	8.0	336.5	3.0	193.6	1914
1915	10.0	227.76 18	2.0	266.74	14.0	15.52 6	113.5	7.83	3.0	105.51	6.0	88.8	0.0	233.5	6.5	204.6	1915
1916 B	7.0	149.94 18	18.0	312.75	25.5	41.57 6	67.5	13.86	3.5	204.53	6.5	0.9	3.0	107.4	2.0	139.5	1916 B
1917	3.0	72.12 18	1.5	149.76	6.5	01.63 6	21.0	5.80	3.5	26.54	5.5	47.9	5.0	161.4	3.5	150.5	1917
1918	13.5	150.29 18	16.5	195.77	17.0	87.69 6	180.0	8.91	3.0	125.55	4.5	86.0	7.0	125.4	5.0	161.4	1918
1919	9.5	72.47 18	0.0	32.78	28.0	15.75 6	133.5	0.94	2.5	224.57	4.0	7.1	9.0	89.3	6.5	172.4	1919
1920 B	6.0	288.64 18	16.0	78.79	10.0	35.81 6	87.5	6.96	3.5	46.58	4.0	45.2	1.5	382.3	2.0	107.3	1920 B
1921	2.0	210.82 18	31.0	124.80	20.5	61.87 6	40.5	12.99	3.0	145.60	3.0	83.2	3.5	346.3	3.5	118.2	1921
1922	12.5	288.99 18	14.0	296.81	1.5	81.93 6	200.0	2.02	2.5	244.61	2.5	4.3	5.5	310.2	5.0	129.2	1922
1923	8.5	211.17 18	29.5	7.82	12.5	9.98 6	153.0	8.04	2.5	66.63	1.5	42.4	7.5	274.2	6.5	140.1	1923
1924 B	5.5	133.34 18	13.5	179.83	24.0	36.04 6	107.5	0.07	3.0	165.64	1.5	80.4	0.5	171.2	2.0	75.1	1924 B
1925	1.5	55.52 18	28.5	225.84	5.0	56.10 6	60.5	6.10	2.5	264.66	1.0	1.5	2.5	135.1	3.5	86.0	1925
1926	12.0	133.70 18	12.0	62.85	15.5	82.16 6	13.5	12.12	2.5	86.67	0.0	39.6	4.5	99.1	5.0	97.0	1926
1927	8.0	55.87 18	27.0	108.86	26.5	10.22 6	173.0	1.15	2.0	185.69	15.0	55.7	6.5	63.0	6.0	107.9	1927
1928 B	4.5	272.05 18	11.0	280.87	8.5	30.28 6	127.0	7.18	3.0	7.70	15.0	93.7	9.5	27.0	2.0	42.9	1928 B
1929	0.5	194.22 18	26.0	326.88	10.0	56.34 6	80.0	13.20	2.5	106.72	14.5	14.8	1.0	320.0	3.5	53.8	1929
1930	11.0	272.40 18	9.5	163.89	0.0	76.40 6	33.5	5.23	2.0	205.73	13.5	52.9	3.0	283.9	5.0	64.8	1930
1931	7.0	194.57 18	24.5	209.90	11.0	44.45 6	192.5	8.26	2.0	27.75	12.5	90.9	5.0	247.9	6.5	75.7	1931
1932 B	4.0	116.75 18	9.0	46.91	22.5	30.51 6	147.0	0.29	2.5	126.76	13.0	12.0	8.0	211.0	2.0	10.7	1932 B
1933	0.0	38.93 18	24.0	92.92	3.5	50.57 6	100.0	6.31	2.0	225.78	12.0	50.1	0.0	108.8	3.5	21.6	1933
1934	10.5	117.10 18	7.0	264.93	14.0	76.63 6	53.0	12.34	2.0	47.79	11.0	88.2	2.0	72.8	5.0	32.5	1934
1935	6.5	39.28 18	22.0	310.94	25.0	4.69 6	6.5	4.37	1.5	146.81	10.5	9.2	4.0	36.8	6.5	43.5	1935
1936 B	3.0	255.45 18	6.5	147.94	7.0	24.75 6	166.5	7.40	2.0	245.82	10.5	47.3	7.0	0.7	1.5	277.4	1936 B
1937	14.0	39.63 18	21.5	193.95	17.5	50.80 6	119.5	13.42	2.0	67.84	9.5	85.4	8.5	360.7	3.0	288.4	1937
1938	9.5	255.80 18	5.0	30.96	28.0	76.86 6	73.0	5.45	1.5	166.85	9.0	6.4	0.5	257.7	5.0	0.3	1938
1939	5.5	177.98 18	20.0	76.97	9.0	96.92 6	26.0	11.48	1.0	265.87	8.0	44.5	2.5	221.6	6.5	111.3	1939
1940 B	2.5	100.16 18	4.0	248.98	21.0	24.98 6	186.5	0.81	2.0	87.89	8.0	82.6	5.5	185.6	1.5	245.2	1940 B
1941	13.0	178.33 18	19.0	294.99	2.0	45.04 6	139.5	6.53	1.5	186.90	7.5	3.7	7.5	149.5	3.0	256.2	1941
1942	9.0	160.51 18	2.5	132.00	12.5	71.10 6	92.5	12.56	1.5	8.92	6.5	41.7	9.5	113.5	4.5	267.1	1942
1943	5.0	22.68 18	17.5	178.00	23.0	97.15 6	46.0	4.59	1.0	110.93	5.5	79.8	1.5	10.5	0.0	278.1	1943
1944 B	1.5	238.86 18	2.0	15.01	5.5	19.21 6	0.0	10.62	1.5	206.95	6.0	0.9	4.0	370.4	1.5	213.0	1944 B
1945	12.5	23.03 18	17.0	61.02	16.0	45.27 6	159.0	13.65	1.5	28.96	5.0	38.9	6.0	334.4	3.0	224.0	1945
1946	8.0	239.21 18	0.0	233.03	26.5	71.33 6	112.5	5.07	1.0	127.98	4.0	77.0	8.0	298.4	4.5	234.9	1946
1947	4.0	161.39 18	15.0	279.03	7.5	91.39 6	65.5	11.70	0.5	227.00	3.0	115.1	0.0	195.3	6.0	245.9	1947
1948 B	1.0	83.56 18	31.0	325.04	19.5	19.45 6	20.0	3.73	1.5	49.01	3.5	36.2	3.0	159.3	1.5	180.8	1948 B
1949	11.5	161.74 18	14.5	162.05	0.5	39.51 6	179.0	6.76	1.0	148.03	2.5	74.2	5.0	123.3	3.0	191.8	1949
1950	7.5	83.91 + 18	29.5	208.06	11.0	65.57 + 6	132.0	12.79	0.5	247.04	1.5	112.3	7.0	87.2	4.5	202.7	1950

TABLE 3 (cont.). Values of the Arguments and of L , $-\Omega$, ω for the beginnings of the years 1900 to 1950.

Arg.	t	79	80	81	82	83	84	L (a)	$-\Omega$ (a)	ω	Arg.
Period	d 365.26	c 73	c 73	c 73	d 6800	d 6800	d 6800	1296 0000	1296 0000	1296 000	Period
Addition for Period of t		c 45.66	c 66.85	c 34.19				(units of $0''01$)	(units of $0''1$)	(units of $1''$)	
1900	-1.55	49.48	45.20	33.80	3604	408	5492	933 75827 0	363 5021 0	1203 585	1900
1901	-1.81	22.15	30.04	67.98	3999	773	5857	103 54362 0	433 0835 0	53 970	1901
1902	-2.07	67.81	32.89	29.17	4335	1138	6222	569 32896 0	502 6650 0	200 355	1902
1903	-2.32	40.47	26.74	63.36	4700	1503	6588	1035 11431 0	572 2404 0	346 740	1903
1904 B	-1.58	13.14	20.58	24.54	5066	1860	154	252 33468 +1	642 0185 0	493 526	1904 B
1905	-1.84	58.80	14.43	58.73	5431	2234	519	718 12003 1	711 5999 0	639 911	1905
1906	-2.10	31.46	8.28	10.92	5796	2600	884	1183 90538 1	781 1814 0	786 206	1906
1907	-2.36	4.13	2.12	54.11	6161	2965	1249	353 69073 1	850 7628 0	932 680	1907
1908 B	-1.62	49.79	68.97	15.20	6527	3331	1615	866 91111 1	920 5349 0	1079 466	1908 B
1909	-1.88	22.46	62.82	49.48	92	3696	1980	36 69647 1	990 1163 0	1225 851	1909
1910	-2.14	68.12	56.66	10.67	457	4061	2345	502 48182 1	1059 6977 0	76 236	1910
1911	-2.40	40.78	50.51	44.86	822	4426	2711	968 26718 2	1129 2791 0	222 621	1911
1912 B	-1.66	13.45	44.35	6.04	1188	4792	3077	185 48757 2	1199 0512 2	369 407	1912 B
1913	-1.92	59.11	38.20	40.23	1553	5157	3442	651 27293 2	1268 6326 0	515 792	1913
1914	-2.18	31.77	32.05	1.42	1919	5522	3807	1117 05829 2	42 2140 0	662 177	1914
1915	-2.44	4.44	25.89	35.01	2284	5888	4172	280 84365 2	111 7955 0	808 562	1915
1916 B	-1.70	50.10	19.74	60.79	2650	6254	4538	800 06405 2	181 5675 0	955 347	1916 B
1917	-1.96	22.76	13.59	30.98	3015	6610	4903	1265 84041 2	251 1489 0	1101 732	1917
1918	-2.22	68.43	7.43	65.17	3380	184	5268	405 03478 3	320 7304 0	1248 117	1918
1919	-2.48	41.09	1.28	26.36	3745	549	5634	931 42015 3	390 3118 0	98 502	1919
1920 B	-1.74	13.75	68.13	60.54	4111	915	6000	118 64055 3	460 0838 0	245 288	1920 B
1921	-2.00	59.42	61.97	21.73	4476	1280	6365	584 42592 3	529 6652 0	301 673	1921
1922	-2.26	32.08	55.82	55.92	4841	1645	6730	1050 21120 3	590 2466 0	538 057	1922
1923	-2.52	4.74	49.66	17.10	5206	2010	295	219 99666 3	668 8280 0	684 442	1923
1924 B	-1.78	50.41	43.51	51.29	5572	2376	661	733 21707 3	738 6001 0	831 228	1924 B
1925	-2.04	23.07	37.36	12.48	5937	2742	1026	1199 00245 4	808 1815 0	977 613	1925
1926	-2.30	68.74	31.20	46.67	6303	3107	1391	368 78782 4	877 7029 0	1123 908	1926
1927	-2.56	41.40	25.05	7.85	6668	3472	1756	834 57320 4	947 3443 0	1270 382	1927
1928 B	-1.82	14.06	18.90	42.04	234	3838	2122	51 79361 4	1017 1163 0	121 168	1928 B
1929	-2.08	59.73	12.74	3.23	599	4203	2487	517 57900 4	1086 6977 0	267 553	1929
1930	-2.34	32.39	6.59	37.42	964	4568	2852	983 30438 4	1136 2791 0	413 938	1930
1931	-2.59	5.05	0.44	71.60	1329	4933	3218	153 14977 4	1225 8065 0	560 322	1931
1932 B	-1.85	50.72	67.28	32.79	1695	5299	3584	666 37018 5	1295 6325 0	707 108	1932 B
1933	-2.11	23.38	61.13	66.98	2060	5664	3949	1132 15557 5	69 2139 -1	853 493	1933
1934	-2.37	69.04	54.97	28.17	2425	6030	4314	301 94096 5	138 7953 0	999 878	1934
1935	-2.63	41.71	48.82	62.35	2790	6395	4679	767 26235 5	208 3767 1	1146 262	1935
1936 B	-1.89	14.37	42.67	23.54	3156	6761	5045	1280 94677 5	278 1487 1	1293 048	1936 B
1937	-2.15	60.04	36.51	57.73	3521	326	5410	459 73217 5	347 7301 1	143 433	1937
1938	-2.41	32.70	30.36	18.91	3887	691	5775	916 51756 5	417 3115 1	289 817	1938
1939	-2.67	5.36	24.21	53.10	4252	1056	6141	86 30296 6	486 8929 1	436 202	1939
1940 B	-1.93	51.03	18.05	14.29	4618	1422	6507	599 52339 6	556 6649 1	582 988	1940 B
1941	-2.19	23.69	11.90	48.48	4983	1787	72	1005 30879 6	626 2463 1	729 372	1941
1942	-2.45	69.35	5.75	9.66	5348	2152	437	235 09419 6	695 8277 1	875 757	1942
1943	-2.71	42.02	72.59	43.85	5713	2518	802	700 87959 6	765 4091 1	1022 142	1943
1944 B	-1.97	14.68	66.44	5.04	6079	2884	1168	1214 10002 6	835 1811 1	1168 927	1944 B
1945	-2.23	60.34	60.28	39.23	6444	3249	1533	383 88543 6	904 7025 1	19 312	1945
1946	-2.49	33.01	54.13	0.41	9	3614	1808	849 67084 7	974 3438 1	165 696	1946
1947	-2.75	5.67	47.98	34.60	375	3979	2263	19 45624 7	1043 9252 1	312 081	1947
1948 B	-2.01	51.34	41.82	68.79	741	4345	2629	532 67668 7	1113 6972 1	458 867	1948 B
1949	-2.27	24.00	35.67	29.98	1106	4710	2994	998 46209 7	1183 2786 1	605 251	1949
1950	-2.53	60.66	29.52	64.16	1471	5075	3359	168 24750 +7	1252 8599 -1	751 636	1950

TABLE 3 (cont.). Values of the Arguments for the beginnings of the years 1950 to 2000.

Arg.	D	1	2	3	4	5	6	7	8	9	10	Arg.
Period	^d 29:530588	^c 141	^c 156	^c 116	^c 124	^c 128	^c 132	^c 100	^c 50	^c 42	^c 80	Period
Addition for Period of D		^c 11:400	^c 23:80	^c 1:06	^c 27:81	^c 8:01	^c 30:81	^c 9:00	^c 14:80	^c 5:64	^c 20:10	Addition for Period of D
1950	^d 26:3369	^c 135:648	^c 20:46	^c 91:98	^c 37:24	^c 48:16	^c 12:30	^c 75:49	^c 23:47	^c 22:91	^c 30:60	1950
1951	7:4393	1:842	17:86	105:75	26:77	24:29	16:84	92:47	15:87	12:23	51:89	1951
1952 B	19:0722	138:637	147:45	2:47	112:49	120:41	122:56	0:45	43:46	37:91	53:08	1952 B
1953	0:1746	4:832	144:85	.1624	102:03	96:54	127:09	17:43	35:85	27:24	74:37	1953
1954	10:8075	0:627	118:45	28:96	63:75	64:66	100:81	25:41	13:45	10:92	75:56	1954
1955	21:4405	137:423	92:04	41:67	25:47	32:79	74:53	33:39	41:04	36:60	76:75	1955
1956 B	3:5428	3:617	89:44	55:45	15:00	8:02	79:06	50:36	33:43	25:93	18:04	1956 B
1957	14:1758	140:413	63:03	68:16	100:72	105:04	52:79	58:34	11:03	9:61	19:23	1957
1958	24:8087	136:208	36:63	80:88	62:45	73:16	26:51	66:32	38:62	35:30	20:42	1958
1959	5:9111	2:402	34:02	94:65	51:98	49:29	31:04	83:30	31:01	24:62	41:71	1959
1960 B	17:5440	139:198	7:62	107:37	13:70	17:41	4:76	91:28	8:61	8:30	42:90	1960 B
1961	28:1770	134:993	137:22	4:08	99:42	113:54	110:48	99:26	36:20	33:99	44:09	1961
1962	9:2793	1:188	134:61	17:86	88:95	89:67	115:01	16:24	28:39	23:31	65:38	1962
1963	19:9123	137:423	108:21	30:57	50:68	57:79	88:74	24:22	6:10	6:09	66:57	1963
1964 B	2:0146	4:178	105:60	44:35	40:21	33:92	93:27	41:19	48:58	38:32	7:86	1964 B
1965	12:6476	140:973	79:20	57:09	1:93	2:04	66:99	49:17	26:17	22:00	9:05	1965
1966	23:2805	136:768	52:80	69:78	87:65	98:16	40:71	57:15	3:77	5:68	10:24	1966
1967	4:3829	2:963	50:19	83:55	77:18	74:30	45:24	74:13	40:16	37:01	31:53	1967
1968 B	10:0158	130:758	23:79	96:27	38:91	42:42	18:96	82:11	23:75	20:69	32:72	1968 B
1969	26:6487	135:553	153:38	108:98	0:63	10:54	124:69	90:09	1:35	4:38	33:91	1969
1970	7:7511	1:748	150:78	6:76	114:16	114:67	129:22	7:07	43:74	35:79	55:20	1970
1971	18:3840	138:543	124:37	19:47	75:88	82:79	102:94	15:05	21:33	19:38	56:39	1971
1972 B	0:4804	4:738	121:77	33:25	65:42	58:92	107:47	32:02	13:73	8:71	77:68	1972 B
1973	11:1193	0:533	95:37	45:96	27:14	27:05	81:19	40:00	41:32	34:39	78:87	1973
1974	21:7523	137:328	68:96	58:68	112:86	123:17	54:91	47:98	18:91	18:07	0:06	1974
1975	2:8546	3:523	66:36	72:45	102:39	99:30	59:45	64:96	11:31	7:40	21:35	1975
1976 B	14:4876	140:318	39:95	85:17	64:11	67:42	33:17	72:94	38:90	33:08	22:54	1976 B
1977	25:1205	130:113	13:55	97:88	25:84	35:54	6:89	80:92	16:49	16:77	23:73	1977
1978	6:2229	2:308	10:94	111:66	15:37	11:67	11:42	97:89	8:89	6:09	45:02	1978
1979	16:8558	139:103	140:54	8:37	101:09	107:80	117:14	5:87	30:48	31:77	40:21	1979
1980 B	28:4888	134:898	114:14	21:09	62:81	75:92	90:86	13:85	14:07	15:46	47:40	1980 B
1981	9:5911	1:093	111:53	34:86	52:35	52:05	95:40	30:83	9:47	4:78	68:69	1981
1982	20:2241	137:888	85:13	47:58	14:07	20:17	69:12	38:81	34:06	30:46	69:88	1982
1983	1:3264	4:083	82:52	61:35	3:60	124:30	73:65	55:79	20:45	19:79	11:17	1983
1984 B	12:0594	140:878	56:12	74:07	89:32	92:42	47:37	63:77	4:05	3:47	12:36	1984 B
1985	23:5923	136:673	29:71	86:79	51:04	60:55	21:09	71:75	31:64	29:16	13:55	1985
1986	4:6947	2:868	27:11	100:56	40:58	36:68	25:62	88:72	24:03	18:48	34:84	1986
1987	15:3276	139:663	0:71	113:28	2:30	4:80	131:35	96:70	1:63	2:16	36:03	1987
1988 B	26:9606	135:458	130:30	9:99	88:02	100:92	105:07	4:68	29:22	27:85	37:22	1988 B
1989	8:0629	1:653	127:70	23:77	77:55	77:05	109:60	21:66	21:61	17:17	58:51	1989
1990	18:6959	138:448	101:29	36:48	39:27	45:17	83:32	29:64	49:21	0:85	59:70	1990
1991	29:3288	134:243	74:89	49:20	1:00	13:30	57:04	37:62	26:80	26:54	60:89	1991
1992 B	11:4312	0:438	72:28	62:97	114:53	117:43	61:57	54:60	19:19	15:86	2:18	1992 B
1993	22:0641	137:233	45:88	75:69	76:25	85:55	35:30	62:58	46:79	41:53	3:37	1993
1994	3:1665	3:428	43:28	89:46	65:78	61:68	39:83	79:55	39:18	30:87	24:66	1994
1995	13:7994	140:223	16:87	102:18	27:51	29:80	13:55	87:53	16:77	14:55	25:85	1995
1996 B	25:4324	136:013	146:47	114:89	113:23	123:92	119:27	95:51	44:37	40:24	27:94	1996 B
1997	0:5347	2:213	143:86	12:67	102:76	102:06	123:80	12:49	30:76	29:56	48:33	1997
1998	17:1677	139:008	117:46	25:38	64:48	70:18	97:52	20:47	14:35	13:24	40:52	1998
1999	27:8006	134:804	91:06	38:10	26:20	38:30	71:25	28:45	41:95	38:93	50:71	1999
2000 B	9:9930	0:998	88:45	51:87	15:74	14:43	73:78	45:42	34:34	28:25	72:00	2000 B

TABLE 3 (cont.). Values of the Arguments for the beginnings of the years 1950 to 2000.

Arg.	23		24		25		26		27		28		29		30 (a)		Arg.	
Period	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	Period	
Half day	599		167		189		142		258		178		207		330		Half day	
1950	8.0	89.2	0.0	51.6	21.0	39.0	10.0	16.11	32.5	207.2	1.0	14.1	12.5	38.3	15.5	327.541 - 38	1950	
1951	3.5	334.2	10.0	121.7	1.5	105.0	17.0	120.09	14.5	44.2	0.5	77.2	26.0	179.3	22.5	189.503 38	1951	
1952 B	0.0	579.2	7.0	127.7	9.0	28.0	25.5	82.07	34.0	60.2	1.0	140.2	12.0	4.3	3.0	15.465 38	1952 B	
1953	11.5	90.2	3.0	133.8	15.0	140.0	3.0	100.05	13.5	155.2	1.0	25.3	25.5	145.3	9.5	207.427 38	1953	
1954	7.0	335.2	13.5	36.8	21.5	63.0	10.5	62.03	30.0	171.2	0.5	88.3	10.0	177.3	16.5	69.390 37	1954	
1955	2.5	580.2	9.5	42.9	2.0	129.0	18.0	24.01	12.0	8.2	0.0	151.3	24.0	111.4	23.0	261.352 37	1955	
1956 B	15.0	91.2	6.5	48.9	9.5	52.0	26.0	127.99	29.5	24.3	1.0	36.4	9.5	143.4	3.5	87.315 37	1956 B	
1957	10.5	336.1	2.5	55.0	15.5	164.0	4.0	3.97	11.0	119.3	0.5	99.4	23.5	77.4	10.0	279.278 37	1957	
1958	6.0	581.1	12.5	125.0	22.0	87.0	11.0	107.95	27.5	135.3	0.0	162.4	8.0	109.4	17.0	141.241 37	1958	
1959	2.0	227.1	8.5	131.1	2.5	153.0	18.5	69.93	9.0	230.3	0.0	47.5	22.0	43.4	24.0	3.204 37	1959	
1960 B	14.0	337.1	5.5	137.1	10.0	76.0	27.0	31.91	26.5	246.3	0.5	110.5	7.5	75.4	4.0	159.167 37	1960 B	
1961	9.5	582.1	1.5	143.2	16.0	188.0	4.5	49.89	8.5	83.3	0.0	173.5	21.5	9.4	11.0	21.130 37	1961	
1962	5.5	228.1	12.0	46.2	22.5	111.0	12.0	11.87	25.0	99.3	0.0	58.6	6.0	41.5	17.5	213.094 36	1962	
1963	1.0	473.1	8.0	52.3	3.0	177.0	19.0	115.85	6.5	194.4	9.5	76.6	19.5	182.5	24.5	75.057 36	1963	
1964 B	13.0	583.1	5.0	58.3	10.5	100.0	27.5	77.83	24.0	210.4	0.5	6.6	5.5	7.5	7.5	4.5	231.021 36	1964 B
1965	9.0	229.1	1.0	64.4	17.0	23.0	5.0	95.81	6.0	47.4	0.0	69.7	19.0	148.5	11.5	92.985 36	1965	
1966	4.5	474.1	11.0	134.4	23.0	135.0	12.5	57.79	22.5	63.4	9.5	87.7	3.5	180.5	18.0	284.349 36	1966	
1967	0.5	120.1	7.0	140.5	4.0	12.0	20.0	19.77	4.0	158.4	9.0	150.7	17.5	114.5	25.0	146.913 36	1967	
1968 B	12.5	230.1	4.0	146.5	11.0	124.0	28.0	123.75	21.5	174.4	0.0	80.8	3.0	140.6	5.0	302.877 36	1968 B	
1969	8.0	475.1	0.0	152.6	17.5	47.0	5.5	141.73	3.5	11.4	9.5	98.8	17.0	80.6	12.0	164.841 36	1969	
1970	4.0	121.1	10.5	55.6	23.5	159.0	13.0	103.72	20.0	27.4	9.0	161.8	1.5	112.6	19.0	26.805 36	1970	
1971	15.0	231.1	6.5	61.7	4.5	36.0	20.5	65.70	1.5	122.5	9.0	46.9	15.5	40.6	25.5	218.770 35	1971	
1972 B	11.5	476.1	3.5	67.7	11.5	148.0	29.0	27.68	19.0	138.5	9.5	109.9	1.0	78.6	6.0	44.735 35	1972 B	
1973	7.5	122.1	13.5	137.8	18.0	71.0	6.5	45.66	0.5	233.5	9.0	172.9	15.0	12.6	12.5	236.099 35	1973	
1974	3.0	367.1	9.5	143.8	24.0	183.0	14.0	7.64	17.0	249.9	9.0	58.0	28.5	153.6	19.5	98.664 35	1974	
1975	14.0	477.1	4.5	149.9	5.0	60.0	21.0	111.62	34.0	7.5	8.5	121.0	13.0	185.7	26.0	290.629 35	1975	
1976 B	11.0	123.1	2.5	155.9	12.0	171.9	29.5	73.60	16.5	102.5	9.5	6.1	28.0	119.7	6.5	116.594 35	1976 B	
1977	6.5	368.1	13.0	59.0	18.5	94.5	7.0	91.58	33.0	118.5	9.0	69.1	12.5	151.7	13.0	308.560 35	1977	
1978	2.5	14.1	9.0	65.0	25.0	17.9	14.5	53.57	14.5	213.5	8.5	132.1	26.5	85.7	20.0	170.525 34	1978	
1979	13.5	124.1	5.0	71.1	5.5	83.9	22.0	15.55	31.0	229.6	8.5	17.2	11.0	117.7	27.0	32.491 34	1979	
1980 B	10.0	369.1	2.0	77.1	13.0	6.9	0.5	33.53	14.0	66.6	9.0	80.2	26.0	51.7	7.0	188.456 34	1980 B	
1981	6.0	15.1	12.0	147.2	19.0	118.9	7.5	137.51	30.5	82.6	8.5	143.2	10.5	83.7	14.0	50.422 34	1981	
1982	1.5	260.1	8.0	153.2	25.5	41.9	15.0	99.49	12.0	177.6	8.5	28.3	24.5	17.8	20.5	242.388 34	1982	
1983	12.5	370.1	4.0	159.3	6.0	107.9	22.5	61.47	28.5	193.6	8.0	91.3	9.0	49.8	0.0	68.354 34	1983	
1984 B	9.5	16.0	1.0	165.3	13.5	30.9	1.0	79.45	11.5	30.6	8.5	154.3	23.5	190.8	7.5	260.320 34	1984 B	
1985	5.0	261.0	11.5	68.4	19.5	142.9	8.5	41.44	28.0	46.6	8.5	39.4	8.5	15.8	14.5	122.286 34	1985	
1986	0.5	506.0	7.5	74.4	0.5	10.9	16.0	3.42	9.5	141.6	8.0	102.4	22.0	156.8	21.0	314.253 34	1986	
1987	12.0	17.0	3.5	80.5	6.5	131.9	23.0	107.40	26.0	157.7	7.5	165.4	6.5	188.8	0.5	140.219 33	1987	
1988 B	8.5	262.0	0.5	86.5	14.0	54.9	1.5	125.38	8.5	252.7	8.5	50.5	21.5	122.8	8.5	2.186 33	1988 B	
1989	4.0	507.0	10.5	156.6	20.0	166.9	9.0	87.36	25.5	10.7	8.0	113.5	6.0	154.9	15.0	194.153 33	1989	
1990	0.0	153.0	6.5	162.6	1.0	43.9	16.5	49.35	7.0	105.7	7.5	176.6	20.0	88.9	22.0	56.120 33	1990	
1991	11.0	263.0	3.0	1.7	7.0	155.9	24.0	11.33	23.5	121.7	7.5	61.6	4.5	120.9	1.0	212.087 33	1991	
1992 B	7.5	508.0	0.0	7.7	14.5	78.9	2.5	29.31	6.0	216.7	8.0	124.6	19.5	54.9	9.0	74.054 33	1992 B	
1993	3.5	154.0	10.0	77.8	21.0	1.9	9.5	133.29	22.5	232.7	8.0	9.7	4.0	80.9	15.5	260.021 33	1993	
1994	14.5	264.0	6.0	83.8	1.5	67.9	17.0	95.28	4.5	69.7	7.5	72.7	18.0	20.9	22.5	127.989 33	1994	
1995	10.0	509.0	2.0	89.9	7.5	179.9	24.5	57.26	21.0	85.7	7.0	135.7	2.5	52.9	1.5	283.956 33	1995	
1996 B	7.0	155.0	13.0	159.9	15.0	102.9	3.0	75.24	3.5	180.8	8.0	20.8	17.0	194.0	9.5	145.924 32	1996 B	
1997	2.5	400.0	9.0	166.0	21.5	25.5	10.5	37.22	20.0	196.8	7.5	83.8	2.0	19.0	16.5	7.891 32	1997	
1998	13.5	510.0	5.5	5.0	2.0	91.9	17.5	141.21	2.0	33.8	7.0	146.8	15.5	160.0	23.0	199.859 32	1998	
1999	9.5	156.0	1.5	11.1	8.5	14.9	25.0	103.19	18.5	49.8	7.0	31.9	0.0	192.0	2.5	25.827 32	1999	
2000 B	6.0	401.0	12.5	81.1	15.5	126.9	3.5	121.17	1.0	144.8	7.5	94.9	15.0	126.0	10.0	217.795 - 32	2000 B	

TABLES OF THE MOON. SECT. II.

TABLE 3 (cont.). Values of the Arguments for the beginnings of the years 1950 to 2000.

Arg.	11	12	13	14	15	16	17	18	19	20	21	22	Arg.
Period	^c 44	^c 24	^c 44	^c 32	^c 28	^c 251	^c 51	^c 38	^c 76	^c 94	^c 56	^c 36	Period
Addition for Period of D	^c 3.94	^c 7.75	^c 7.90	^c 5.16	^c 0.50	^c 18.000	^c 8.69	^c 9.20	^c 7.50	^c 29.50	^c 1.51	^c 13.88	Addition for Period of D
1950	20.17	13.24	9.39	20.08	8.10	42.453	21.44	22.40	19.10	71.32	4.60	33.40	1950
1951	27.39	18.00	24.07	23.16	14.59	25.455	32.41	28.00	40.59	78.80	24.23	33.83	1951
1952 B	30.67	15.01	30.86	21.09	20.58	24.1456	34.69	24.40	54.59	56.79	42.35	20.38	1952 B
1953	37.89	19.77	1.55	24.17	27.07	22.4458	45.66	30.00	0.08	64.28	5.98	20.81	1953
1954	41.16	16.78	8.34	22.09	5.06	189.460	47.94	26.40	14.07	42.27	24.10	7.36	1954
1955	0.44	13.79	15.13	20.01	11.05	154.461	50.22	22.80	28.07	20.25	42.22	29.91	1955
1956 B	7.66	18.56	29.82	23.10	17.54	137.463	10.19	28.40	49.56	27.74	5.85	30.34	1956 B
1957	10.94	15.57	36.61	21.02	23.53	102.465	12.47	24.80	63.56	5.73	23.97	16.89	1957
1958	14.22	12.58	43.40	18.94	1.52	67.466	14.75	21.20	1.55	77.72	42.09	3.44	1958
1959	21.44	17.34	14.09	22.03	8.01	50.468	25.72	26.80	23.04	85.20	5.72	3.87	1959
1960 B	24.72	14.35	20.88	19.95	14.00	15.470	28.00	23.20	37.04	63.19	23.84	26.42	1960 B
1961	28.00	11.36	27.67	17.87	20.00	23.1471	30.28	19.60	51.03	41.18	41.96	12.97	1961
1962	35.22	16.12	42.36	20.95	26.40	214.473	41.25	25.20	72.53	48.67	5.59	13.40	1962
1963	38.49	13.13	5.15	18.88	4.48	179.475	43.53	21.60	10.52	26.65	23.71	35.95	1963
1964 B	1.71	17.89	19.84	21.06	10.97	102.477	3.50	27.20	32.02	34.14	43.54	0.38	1964 B
1965	4.99	14.90	26.63	19.88	16.96	127.478	5.78	23.60	46.01	12.13	5.46	22.93	1965
1966	8.27	11.92	33.42	17.81	22.95	92.480	8.06	20.00	60.00	84.12	23.58	9.48	1966
1967	15.49	16.68	4.11	20.89	1.44	75.482	19.02	25.60	5.50	91.60	43.21	9.91	1967
1968 B	18.77	13.69	10.90	18.81	7.43	40.483	21.31	22.00	19.49	69.59	5.33	32.46	1968 B
1969	22.05	10.70	17.69	16.73	13.42	5.485	23.59	18.40	33.49	47.58	23.45	19.01	1969
1970	29.27	15.46	32.38	19.82	19.91	239.487	34.56	24.00	54.98	55.07	43.08	19.44	1970
1971	32.55	12.47	39.17	17.74	25.90	204.488	36.83	20.40	68.97	33.05	5.20	5.99	1971
1972 B	39.70	17.23	9.85	20.82	4.39	187.490	47.80	26.00	14.47	40.54	24.83	6.42	1972 B
1973	43.04	14.24	16.64	18.75	10.38	152.492	50.08	22.40	28.46	18.53	42.95	28.97	1973
1974	2.32	11.25	23.43	16.67	16.37	117.493	1.36	18.80	42.46	90.52	5.07	15.52	1974
1975	9.54	16.02	38.12	19.75	22.86	100.495	12.33	24.40	63.95	4.00	24.70	15.95	1975
1976 B	12.82	13.03	0.91	17.67	0.85	65.497	14.61	20.80	1.95	75.99	42.82	2.50	1976 B
1977	16.10	10.04	7.70	15.60	6.84	30.499	16.89	17.20	15.94	53.98	4.94	25.05	1977
1978	23.32	14.80	22.39	18.68	13.33	13.500	27.86	22.80	37.43	61.47	24.57	25.48	1978
1979	26.60	11.81	29.18	16.60	19.32	229.502	30.14	19.20	51.43	39.45	42.69	12.03	1979
1980 B	29.88	8.82	35.97	14.53	25.31	194.504	32.42	15.60	65.42	17.44	4.81	34.58	1980 B
1981	37.10	13.58	6.66	17.61	3.80	177.505	43.39	21.20	10.92	24.93	24.44	35.01	1981
1982	40.37	10.59	13.45	15.53	9.80	142.507	45.67	17.60	24.91	2.92	42.56	21.56	1982
1983	3.59	15.35	28.14	18.61	16.29	125.509	5.64	23.20	46.40	10.40	6.19	21.99	1983
1984 B	6.87	12.36	34.93	16.54	22.28	90.511	7.92	19.60	60.40	82.39	24.31	8.54	1984 B
1985	10.15	9.37	41.72	14.46	0.27	55.512	10.20	16.00	74.39	60.38	42.43	31.09	1985
1986	17.37	14.14	12.41	17.54	6.76	38.514	21.17	21.60	19.89	67.87	6.06	31.52	1986
1987	20.65	11.15	19.20	15.47	12.75	3.516	23.45	18.00	33.88	45.86	24.18	18.07	1987
1988 B	23.93	8.16	25.99	13.39	18.74	219.517	25.73	14.40	47.88	23.84	42.30	4.62	1988 B
1989	31.15	12.92	40.68	16.47	25.23	202.519	36.70	20.00	69.37	31.53	5.93	5.05	1989
1990	34.43	9.93	3.47	14.39	3.22	167.521	38.98	16.40	7.36	91.32	24.05	27.60	1990
1991	37.70	6.94	10.26	12.32	9.21	132.523	41.26	12.81	21.36	8.31	42.17	14.15	1991
1992 B	0.92	11.70	24.95	15.40	15.70	115.524	1.23	18.41	42.85	88.79	5.80	14.58	1992 B
1993	4.20	8.71	31.74	13.32	21.69	80.526	3.51	14.81	56.85	60.78	23.92	1.13	1993
1994	11.42	13.47	2.42	16.41	0.18	63.528	14.48	20.41	2.34	74.27	43.55	1.55	1994
1995	14.70	10.49	9.21	14.33	6.17	28.530	16.76	16.81	16.33	52.26	5.67	24.10	1995
1996 B	17.98	7.50	16.00	12.25	12.16	244.531	19.04	13.21	30.33	30.24	23.79	10.65	1996 B
1997	25.20	12.26	30.69	15.33	18.65	227.533	30.01	18.81	51.82	37.73	43.42	11.07	1997
1998	28.48	9.27	37.48	13.26	24.64	192.535	32.29	15.21	65.82	15.72	5.54	33.63	1998
1999	31.76	6.28	0.27	11.18	2.63	157.536	34.57	11.61	3.81	87.71	23.66	20.18	1999
2000 B	38.97	11.04	14.96	14.26	9.12	140.538	45.54	17.21	25.30	1.19	43.29	20.61	2000 B

TABLES OF THE MOON. SECT. II.

TABLE 3 (cont.). Values of the Arguments for the beginnings of the years 1950 to 2000.

Arg.	31 (a)		32		33 (a)		34		35		36		37		38		Arg.
Period	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	Period
Half day	c		c		c		c		c		c		c		c		Half day
	294		335		98		14		277		117		396		299		
1950	7.5	83.91 + 18	29.5	208.06	11.0	65.57 + 6	132.0	12.79	0.5	247.04	1.5	112.3	7.0	87.2	4.5	202.7	1950
1951	3.5	6.09 18	13.0	45.06	21.5	91.03 6	85.5	4.81	0.5	69.06	1.0	33.4	9.0	51.2	6.0	213.6	1951
1952 B	0.0	222.27 18	29.0	91.07	4.0	13.69 6	39.5	10.84	1.0	168.08	1.0	71.4	1.5	344.1	1.5	148.6	1952 B
1953	11.0	6.44 18	12.0	263.08	14.5	39.74 6	198.5	13.87	0.5	267.09	0.0	109.5	3.5	308.1	3.0	159.5	1953
1954	6.5	222.62 18	27.0	309.08	25.0	65.80 6	152.0	5.90	0.5	89.11	15.5	8.6	5.5	272.1	4.5	170.5	1954
1955	2.5	144.79 18	10.5	146.09	6.0	85.86 6	105.0	11.93	0.0	188.12	14.5	46.7	7.5	236.0	6.0	181.4	1955
1956 B	14.0	222.97 18	26.5	192.09	18.0	13.92 6	59.5	3.96	1.0	10.14	14.5	84.7	0.5	133.0	1.5	116.4	1956 B
1957	10.0	145.15 18	10.0	29.10	28.5	39.98 6	12.5	9.99	0.5	109.16	14.0	5.8	2.5	97.0	3.0	127.3	1957
1958	6.0	67.32 18	25.0	75.11	9.5	60.04 6	171.5	13.02	0.0	208.17	13.0	43.9	4.5	60.9	4.5	138.3	1958
1959	1.5	283.50 18	8.0	247.11	20.0	86.10 6	125.0	5.05	0.0	30.10	12.0	81.9	9.5	24.9	6.0	149.2	1959
1960 B	13.5	67.68 18	24.0	298.12	2.5	8.16 6	79.0	11.07	0.5	129.21	12.5	3.0	9.0	384.9	1.5	84.2	1960 B
1961	9.0	283.85 18	7.5	130.13	13.0	34.21 6	32.5	3.10	0.0	228.22	11.5	44.1	1.0	281.8	3.0	95.1	1961
1962	5.0	206.03 18	22.5	176.13	23.5	60.27 6	191.5	6.13	0.0	50.24	10.5	79.2	3.0	245.8	4.5	106.1	1962
1963	1.0	128.20 18	6.0	13.14	4.5	80.33 6	144.5	12.16	9.0	212.26	10.0	0.2	3.0	209.7	6.0	117.0	1963
1964 B	12.5	206.38 18	22.0	59.14	16.5	8.39 6	99.0	4.19	0.0	248.27	10.0	38.3	8.0	173.7	1.5	52.9	1964 B
1965	8.5	128.56 18	5.0	231.15	27.0	34.45 6	52.0	10.22	0.0	70.29	9.0	70.4	0.0	70.7	3.0	62.0	1965
1966	4.5	50.73 18	20.0	277.15	8.0	54.51 6	5.5	2.25	9.0	232.31	8.0	114.4	2.0	34.6	4.5	73.9	1966
1967	0.0	266.91 18	3.5	114.16	18.5	80.57 6	164.5	5.28	9.0	54.32	7.5	35.5	3.5	391.6	6.0	84.8	1967
1968 B	12.0	51.08 18	19.5	160.16	1.0	2.63 6	118.5	11.31	0.0	90.34	7.5	73.6	6.5	358.6	1.5	19.8	1968 B
1969	7.5	267.26 18	2.5	332.17	11.5	28.68 6	72.0	3.34	9.0	252.30	6.5	111.6	8.5	322.5	3.0	30.7	1969
1970	3.5	189.44 18	18.0	43.17	22.0	54.74 6	25.0	9.37	9.0	74.37	6.0	32.7	0.5	219.5	4.5	41.7	1970
1971	14.0	267.61 18	1.0	215.18	3.0	74.80 6	184.0	12.40	9.0	173.39	5.0	79.8	2.5	183.4	6.0	32.6	1971
1972 B	11.0	189.79 18	17.0	261.18	15.0	2.86 6	138.5	4.43	9.0	272.41	5.0	108.9	5.5	147.4	1.0	286.6	1972 B
1973	7.0	111.07 18	0.5	98.19	25.5	28.92 6	91.5	10.46	9.0	94.42	4.5	29.9	7.5	111.4	2.5	297.5	1973
1974	3.0	34.14 18	15.5	144.19	6.5	48.98 6	4.5	2.49	8.5	193.44	3.5	68.0	9.5	75.3	4.5	9.5	1974
1975	13.5	112.32 18	30.5	190.20	17.0	75.04 6	204.0	5.52	8.5	15.46	2.5	106.1	1.0	368.3	6.0	30.4	1975
1976 B	10.5	34.50 18	15.0	27.20	29.0	3.09 6	158.0	11.55	9.0	114.48	3.0	27.1	4.0	332.3	1.0	254.4	1976 B
1977	6.0	250.67 18	30.0	73.21	10.0	23.15 6	111.5	3.58	8.5	213.49	2.0	65.2	6.0	296.2	2.5	265.3	1977
1978	2.0	172.85 18	13.0	245.21	20.5	49.21 6	64.5	9.61	8.5	35.51	1.0	103.3	8.0	260.2	4.0	276.3	1978
1979	12.5	251.02 18	28.0	291.21	1.5	69.27 6	18.0	1.64	8.0	134.53	0.5	24.3	0.0	157.2	5.5	287.2	1979
1980 B	9.5	173.20 18	12.5	128.22	13.0	93.33 6	178.0	4.67	8.5	233.55	0.5	62.4	3.0	121.1	1.0	222.2	1980 B
1981	5.5	95.38 18	27.5	174.22	24.0	23.39 6	131.0	10.70	8.5	55.56	15.5	78.5	5.0	85.1	2.5	233.1	1981
1982	1.5	17.55 18	11.0	11.22	5.0	43.45 6	84.5	2.73	8.0	154.58	14.5	116.6	7.0	49.0	4.0	244.1	1982
1983	12.0	95.73 18	26.0	57.23	15.5	69.51 6	37.5	8.70	7.5	253.00	14.0	37.6	9.0	13.0	5.5	255.0	1983
1984 B	9.0	17.91 18	10.0	229.23	27.0	95.56 6	197.5	11.79	8.5	75.62	14.0	75.7	1.5	306.0	1.0	190.0	1984 B
1985	4.5	234.08 18	25.0	275.23	8.5	17.62 6	151.0	3.82	8.0	174.63	13.0	113.8	3.5	269.9	2.5	200.9	1985
1986	0.5	156.26 18	8.5	112.24	19.0	43.68 6	104.0	9.85	7.5	273.65	12.5	34.8	5.5	233.9	4.0	211.9	1986
1987	11.0	234.44 18	23.5	158.24	0.0	63.74 6	57.5	1.89	7.5	95.07	11.5	72.9	7.5	197.9	5.5	242.8	1987
1988 B	8.0	156.61 18	7.5	330.24	11.5	89.80 6	11.5	7.92	8.0	194.69	11.5	111.0	0.5	94.8	1.0	157.8	1988 B
1989	4.0	78.79 18	23.0	41.25	22.5	17.86 6	170.5	10.95	8.0	16.70	11.0	32.0	2.5	58.8	2.5	168.7	1989
1990	0.0	0.97 18	6.0	213.25	3.5	37.92 6	124.0	2.98	7.5	115.74	10.0	70.1	4.5	22.7	4.0	179.7	1990
1991	10.5	79.14 18	21.0	259.25	14.0	65.98 6	77.0	9.01	7.0	214.74	9.0	108.2	6.0	382.7	5.5	190.6	1991
1992 B	7.5	1.32 18	5.5	96.26	25.5	90.03 6	31.5	1.04	8.0	30.76	9.5	29.2	9.0	346.7	1.0	125.6	1992 B
1993	3.0	217.50 18	20.5	142.26	7.0	12.09 6	190.5	4.07	7.5	135.78	8.5	67.3	1.0	243.6	2.5	136.5	1993
1994	14.0	1.67 18	3.5	314.26	17.5	38.15 6	143.5	10.10	7.0	234.79	7.5	105.4	3.0	207.6	4.0	147.5	1994
1995	9.5	217.85 18	19.0	25.26	28.0	64.21 6	97.0	2.14	7.0	50.81	7.0	26.5	5.0	171.6	5.5	158.4	1995
1996 B	6.5	140.03 18	3.0	197.26	10.0	84.27 6	51.0	8.17	7.5	155.83	7.0	64.5	8.0	135.5	1.0	93.4	1996 B
1997	2.5	62.20 18	18.0	243.27	21.0	12.33 6	4.5	0.20	7.0	254.85	6.0	102.6	0.0	32.5	2.5	104.3	1997
1998	13.0	140.38 18	1.5	80.27	2.0	32.39 6	163.5	3.23	7.0	76.87	5.5	23.7	1.5	392.4	4.0	115.3	1998
1999	9.0	62.55 18	16.5	126.27	12.5	58.45 6	116.5	9.26	6.5	175.88	4.5	61.7	3.5	356.4	5.5	126.2	1999
2000 B	5.5	278.73 + 18	0.5	298.27	24.0	84.51 + 6	71.0	1.29	7.0	274.90	4.5	99.8	6.5	320.4	1.0	61.2	2000 B

TABLE 3 (cont.). Values of the Arguments for the beginnings of the years 1950 to 2000.

Arg.	39		40		41		42		43		44		45		46		47		Arg.
Period	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	Period
Half day	31		311		21		152		189		179		133		68		25		Half day
1950	5.0	2.7	6.5	219.29	127.5	1.1	24.5	94.4	0.5	100.9	1.5	151.1	6.5	22.4	4.5	6.9	88.5	14.24	1950
1951	3.0	13.6	4.0	303.28	145.5	17.1	13.5	4.4	1.0	162.0	5.5	104.0	9.0	117.5	9.5	32.0	88.5	1.26	1951
1952 B	2.0	24.5	3.0	76.27	165.0	12.0	3.0	66.4	3.0	34.1	3.5	27.9	3.5	71.7	3.0	10.0	89.0	13.28	1952 B
1953	0.5	4.4	0.5	160.26	10.0	15.0	18.5	91.3	3.5	95.2	0.0	130.8	6.5	33.8	5.0	35.1	89.0	0.30	1953
1954	4.5	4.3	11.5	310.25	28.5	9.9	7.5	1.3	4.0	156.3	4.0	83.8	9.0	139.0	0.5	13.2	88.5	12.31	1954
1955	2.5	15.2	9.5	83.24	47.0	4.9	23.0	26.3	5.0	28.3	1.0	7.7	2.5	83.1	2.5	38.3	88.0	24.33	1955
1956 B	1.5	26.1	8.0	167.22	66.0	20.8	12.5	88.3	6.5	89.4	5.5	139.6	6.5	45.3	5.5	63.3	89.0	11.35	1956 B
1957	0.0	6.0	5.5	251.21	84.5	15.8	1.0	150.3	7.0	150.5	2.5	63.5	9.5	7.4	1.0	41.4	88.5	23.37	1957
1958	4.0	5.9	3.5	24.20	103.0	10.8	17.0	23.3	8.0	22.6	6.5	16.4	2.5	94.6	3.0	66.4	88.5	10.39	1958
1959	2.0	16.8	1.0	108.19	121.5	5.7	5.5	85.3	8.5	83.7	3.0	119.3	5.5	50.7	5.5	23.5	88.0	22.40	1959
1960 B	1.0	27.7	13.0	258.18	141.0	0.7	22.0	110.3	1.0	103.7	1.0	43.2	0.0	10.9	2.0	1.6	89.0	9.42	1960 B
1961	5.0	27.6	11.0	31.17	159.0	16.6	11.0	20.3	1.5	164.8	4.5	175.1	2.5	106.0	4.0	26.7	88.5	21.44	1961
1962	3.5	7.5	8.5	115.16	4.0	19.6	26.5	45.3	2.5	36.0	1.5	99.0	5.5	68.2	6.0	51.7	88.5	8.46	1962
1963	1.5	18.4	6.0	199.15	22.5	14.5	15.0	107.2	3.0	98.0	5.5	51.9	8.5	30.4	1.5	29.8	88.0	20.47	1963
1964 B	0.5	20.3	4.5	283.14	42.0	9.5	5.0	17.2	4.5	159.1	3.0	154.8	2.5	117.5	4.5	54.9	89.0	7.49	1964 B
1965	4.5	29.2	2.5	56.12	60.5	4.4	20.5	42.2	5.5	31.1	0.0	78.7	5.5	79.7	0.0	32.9	88.5	19.51	1965
1966	3.0	9.1	0.0	140.11	78.5	4.0	9.0	104.2	6.0	92.2	4.0	31.6	8.5	41.8	2.0	58.0	88.5	6.53	1966
1967	1.0	20.1	11.0	290.10	97.0	15.4	24.5	129.2	6.5	153.3	0.5	134.5	1.5	129.0	4.5	15.1	88.0	18.54	1967
1968 B	0.5	0.0	10.0	63.09	116.5	10.3	14.5	39.2	8.5	25.4	5.5	87.4	5.5	91.1	3.5	61.2	89.0	5.56	1968 B
1969	4.0	30.9	7.5	147.08	135.0	5.3	3.0	101.2	0.0	45.5	2.5	11.3	8.5	53.3	3.0	18.2	88.5	17.58	1969
1970	2.5	10.8	5.0	231.07	153.5	0.2	18.5	126.2	0.5	106.6	6.0	143.2	2.0	7.4	5.0	43.3	88.5	4.60	1970
1971	0.5	21.7	3.0	4.06	171.5	16.2	7.5	36.2	1.0	167.6	3.0	67.2	4.5	102.6	0.5	21.4	88.0	16.62	1971
1972 B	0.0	1.6	1.5	88.05	17.5	19.1	24.0	61.2	3.0	39.7	5.5	170.1	8.5	64.7	3.5	46.4	89.0	3.63	1972 B
1973	4.0	1.5	12.5	238.04	36.0	14.1	12.5	123.1	3.5	100.8	4.5	123.0	2.0	18.9	6.0	3.5	88.5	15.05	1973
1974	2.0	12.4	10.5	11.03	54.5	9.0	1.5	33.1	4.0	161.9	1.5	46.9	4.5	114.0	1.0	49.6	88.5	2.67	1974
1975	0.0	23.3	8.0	95.01	73.0	4.0	17.0	58.1	5.0	34.0	5.0	178.8	7.5	76.2	3.5	6.6	88.0	14.09	1975
1976 B	5.0	23.2	6.5	179.00	92.0	20.0	6.5	129.2	6.5	95.0	3.0	102.7	2.0	30.3	0.5	31.7	89.0	1.70	1976 B
1977	3.5	3.1	4.0	262.99	110.5	14.9	22.0	145.1	7.0	150.1	0.0	26.6	4.5	125.5	2.0	9.8	88.5	13.72	1977
1978	1.5	14.0	2.0	35.98	129.0	9.9	11.0	55.1	8.0	28.2	3.5	158.5	7.5	87.6	4.0	34.8	88.5	0.74	1978
1979	5.5	13.9	13.0	185.97	147.5	4.8	26.5	80.1	8.5	89.3	0.5	82.4	1.0	41.8	0.0	59.9	88.0	12.76	1979
1980 B	4.5	24.8	11.5	269.96	166.5	20.8	16.0	142.1	1.0	109.4	5.5	35.3	5.0	3.9	2.5	38.0	88.5	24.77	1980 B
1981	3.0	4.7	9.5	42.95	12.0	2.7	5.0	52.1	1.5	170.4	2.0	138.2	7.5	99.1	4.5	63.0	88.5	11.79	1981
1982	1.0	15.6	7.0	126.94	30.0	18.7	20.5	77.0	2.5	42.5	6.0	91.1	1.0	53.2	0.0	41.1	88.0	23.81	1982
1983	5.0	15.5	4.5	210.93	48.5	13.6	9.0	139.0	3.0	103.6	3.0	15.0	4.0	15.4	2.0	66.2	88.0	10.83	1983
1984 B	4.0	26.4	3.0	294.91	68.0	8.6	26.0	12.0	4.5	164.7	0.5	117.9	7.5	110.5	5.5	23.3	88.5	22.85	1984 B
1985	2.5	6.3	1.0	67.90	86.5	3.5	14.5	74.0	5.5	36.8	4.5	70.8	1.0	64.7	1.0	1.3	88.5	9.86	1985
1986	0.5	17.2	12.0	217.89	104.5	19.5	3.0	136.0	6.0	97.8	1.0	173.7	4.0	26.9	3.0	26.4	88.0	21.88	1986
1987	4.5	17.1	9.5	301.88	123.0	14.5	10.0	9.0	6.5	158.9	5.0	126.7	6.5	122.0	5.0	51.5	88.0	8.90	1987
1988 B	3.5	28.0	8.5	74.87	142.5	9.4	8.5	71.0	8.5	31.0	3.0	50.6	1.0	76.2	1.5	29.5	88.5	20.92	1988 B
1989	2.0	7.9	6.0	158.86	161.0	4.4	24.0	96.0	0.0	51.1	7.0	3.5	4.0	38.3	3.5	54.6	88.5	7.93	1989
1990	0.0	18.8	3.5	242.85	6.0	7.3	13.0	5.9	0.5	112.2	3.5	106.4	7.0	0.5	6.0	11.7	88.0	19.95	1990
1991	4.0	18.7	1.5	15.84	24.5	2.3	1.5	67.9	1.0	173.3	0.5	30.3	0.0	87.6	1.0	57.7	88.0	6.97	1991
1992 B	3.0	29.6	0.0	99.83	43.5	18.2	18.0	92.9	3.0	45.3	5.0	162.2	4.0	49.8	4.5	14.8	88.5	18.99	1992 B
1993	1.5	9.5	11.0	249.81	62.0	13.2	7.0	2.9	3.5	106.4	2.0	86.1	7.0	11.9	6.5	39.9	88.5	6.00	1993
1994	5.5	9.4	9.0	22.80	80.5	8.1	22.5	27.9	4.0	167.5	6.0	33.0	0.0	99.1	2.0	18.0	88.0	18.02	1994
1995	3.5	20.3	6.5	106.79	99.0	3.1	11.0	89.9	5.0	39.6	2.5	141.9	3.0	61.2	4.0	43.0	88.0	5.04	1995
1996 B	3.0	0.2	5.0	190.78	118.0	19.1	0.5	151.9	6.5	100.7	0.5	65.8	7.0	23.4	0.5	21.1	88.5	17.06	1996 B
1997	1.0	11.2	2.5	274.77	136.5	14.0	16.5	24.9	7.0	161.7	4.5	18.7	0.0	110.5	2.5	46.2	88.5	4.08	1997
1998	5.0	11.1	0.5	47.76	155.0	9.0	5.0	86.9	8.0	33.8	1.0	121.6	3.0	72.7	5.0	3.2	88.0	16.09	1998
1999	3.0	22.0	11.5	197.75	0.0	11.9	20.5	111.8	8.5	94.9	5.0	74.5	6.0	34.8	0.0	49.3	88.0	3.11	1999
2000 B	2.5	1.9	10.0	281.74	19.5	6.9	10.5	21.8	1.0	115.0	2.5	177.4	0.0	122.0	3.5	6.4	88.5	15.13	2000 B

TABLE 3 (cont.). Values of the Arguments for the beginnings of the years 1950 to 2000.

Arg.	48		49		50		51		52		53		54		55*		56		57		Arg.
Period	<i>c</i> 159	<i>d</i> 13·63	<i>c</i> 101	<i>d</i> 12·5	<i>c</i> 10	<i>d</i> 22·0	<i>c</i> 2	<i>d</i> 35·0	<i>c</i> 32	<i>d</i> 29·5	<i>c</i> 15	<i>d</i> 32·0	<i>c</i> 73	<i>d</i> 10·0	<i>c</i> 21	<i>d</i> 16·0	<i>c</i> 5	Period			
Addition for Per. of Vert. Arg.	<i>c</i> 4		<i>c</i> 50	Half day	<i>c</i> 19	<i>c</i> 3		<i>c</i> 39		<i>c</i> 47		<i>c</i> 130		<i>c</i> 80		<i>c</i> 112		Half day			
1950	12	10·53	46	11·0	17	7·0	0	14·0	7·0	26·0	20·8	12·5	31·67	1·5	17·4	9·0	5·0	36·3	1950		
1951	64	7·42	82	6·0	13	14·5	2	24·5	38·0	5·5	13·8	22·5	8·65	1·5	61·4	5·5	49·3	55·3	1951		
1952 B	120	5·32	17	2·0	8	1·0	2	1·0	37·0	15·5	21·9	1·0	42·63	3·0	25·5	3·0	53·3	55·3	1952 B		
1953	13	2·22	54	9·5	14	9·0	1	12·0	29·1	24·5	29·9	11·0	19·61	3·0	69·5	15·5	55·3	55·3	1953		
1954	65	12·75	40	4·5	9	17·0	0	23·0	21·1	4·0	23·0	20·5	126·59	3·5	33·6	12·0	52·3	52·3	1954		
1955	117	9·65	76	12·0	15	2·5	0	34·0	13·1	13·0	31·0	30·5	103·57	3·5	77·6	8·5	49·3	49·3	1955		
1956 B	14	7·55	11	8·0	10	11·0	2	10·5	12·1	23·0	39·0	9·5	7·55	5·0	41·7	6·0	46·3	46·3	1956 B		
1957	66	4·45	48	3·0	6	19·0	2	21·5	4·1	2·5	32·1	19·0	114·53	5·5	5·7	2·5	43·3	43·3	1957		
1958	118	1·35	84	10·5	11	4·5	2	32·0	35·1	11·5	40·1	29·0	91·51	5·5	49·8	15·0	45·3	45·3	1958		
1959	11	11·88	70	5·5	6	12·5	1	7·5	34·1	21·0	1·2	6·5	125·49	6·0	13·8	11·5	42·3	42·3	1959		
1960 B	67	9·78	5	1·5	2	21·5	0	19·5	26·1	1·0	41·2	17·5	102·47	7·0	57·8	9·0	39·3	39·3	1960 B		
1961	119	6·67	42	9·0	7	7·0	0	30·5	18·1	10·5	2·3	27·5	79·45	7·5	21·9	5·5	36·3	36·3	1961		
1962	12	3·57	78	4·0	3	14·5	2	6·0	17·1	19·5	10·3	5·0	113·43	7·5	65·9	2·0	33·3	33·3	1962		
1963	64	0·47	13	11·5	8	0·0	2	17·0	9·1	28·5	18·3	15·0	90·41	8·0	30·0	14·5	35·3	35·3	1963		
1964 B	120	12·00	100	7·5	4	9·0	1	29·0	1·1	9·0	11·4	26·0	67·39	9·0	74·0	12·0	32·3	32·3	1964 B		
1965	13	8·90	36	2·0	18	17·0	1	4·5	0·1	18·0	19·4	3·5	101·37	9·5	38·1	8·5	29·3	29·3	1965		
1966	65	5·80	72	10·0	5	2·5	1	15·0	31·1	27·0	27·5	13·5	78·35	10·0	2·1	5·0	26·3	26·3	1966		
1967	117	2·70	7	5·0	0	10·5	0	20·0	23·1	6·5	20·5	23·5	55·33	0·0	25·1	1·5	23·3	23·3	1967		
1968 B	14	0·59	43	8·5	15	19·0	2	2·5	22·1	16·5	28·6	2·0	89·31	1·0	69·2	15·0	25·3	25·3	1968 B		
1969	67	11·13	30	0·5	1	4·5	2	13·5	14·1	25·5	36·6	12·0	66·29	1·5	33·2	11·5	22·3	22·3	1969		
1970	119	8·02	66	3·0	16	12·5	1	24·5	6·2	5·0	20·6	22·0	43·27	1·5	77·3	8·0	19·3	19·3	1970		
1971	12	4·02	1	11·0	2	20·5	0	0·0	5·2	14·0	37·7	32·0	20·25	2·0	41·3	4·5	16·3	16·3	1971		
1972 B	68	2·82	38	6·0	17	7·0	1	11·5	36·2	24·0	43·7	10·5	54·23	3·5	5·4	2·0	13·3	13·3	1972 B		
1973	120	13·35	24	1·5	12	15·0	0	22·5	28·2	3·5	38·8	20·5	31·21	3·5	49·4	14·5	15·3	15·3	1973		
1974	13	10·25	60	9·0	18	0·5	0	33·5	20·2	12·5	46·8	30·5	8·10	4·0	13·4	11·0	12·3	12·3	1974		
1975	65	7·15	96	4·0	13	8·0	2	9·0	19·2	22·0	7·9	8·0	42·17	4·0	57·5	7·5	9·3	9·3	1975		
1976 B	121	5·05	32	0·0	9	17·0	1	21·0	11·2	2·5	0·9	19·0	19·15	5·5	21·5	5·0	6·2	6·2	1976 B		
1977	14	1·95	68	7·5	14	2·5	1	32·0	3·2	11·5	9·0	28·5	126·13	5·5	65·6	1·5	3·2	3·2	1977		
1978	66	12·48	54	2·5	10	10·5	0	7·5	2·2	20·5	17·0	6·5	30·11	6·0	29·6	14·0	5·2	5·2	1978		
1979	118	9·38	90	10·0	15	18·5	0	18·0	33·2	0·0	10·0	16·5	7·09	6·0	73·6	10·5	2·2	2·2	1979		
1980 B	15	7·27	26	6·0	11	5·0	0	30·0	25·2	10·0	18·1	27·0	114·07	7·5	37·7	7·5	111·2	111·2	1980 B		
1981	67	4·17	62	1·0	6	12·5	2	5·5	24·2	19·0	26·1	5·0	18·05	8·0	1·7	4·0	108·2	108·2	1981		
1982	119	1·07	98	8·5	12	20·5	1	16·5	16·2	28·0	34·2	14·5	125·03	8·0	45·8	0·5	105·2	105·2	1982		
1983	16	11·60	85	3·5	7	6·0	1	27·5	8·2	7·5	27·2	24·5	102·01	8·5	9·8	13·0	107·2	107·2	1983		
1984 B	68	9·50	20	12·0	13	15·0	0	4·0	7·2	17·5	35·3	3·5	5·99	9·5	53·9	10·5	104·2	104·2	1984 B		
1985	120	6·40	56	7·0	8	0·5	0	14·5	38·2	26·5	43·3	13·0	112·97	10·0	17·9	7·0	101·2	101·2	1985		
1986	13	3·30	92	2·0	4	8·5	0	25·5	27·3	6·0	36·3	23·0	89·95	0·0	41·0	3·5	98·2	98·2	1986		
1987	69	0·20	28	9·5	9	16·0	2	1·0	29·2	15·0	44·4	0·5	123·94	0·5	5·0	0·0	95·2	95·2	1987		
1988 B	121	11·73	14	5·5	5	2·5	2	13·0	21·3	25·5	5·4	11·5	100·92	1·5	49·0	13·5	97·2	97·2	1988 B		
1989	14	8·63	50	0·5	0	10·5	1	24·0	13·3	4·5	45·5	21·5	77·90	2·0	13·1	10·0	94·2	94·2	1989		
1990	66	5·52	86	8·0	6	18·5	0	35·0	5·3	14·0	6·5	31·5	54·88	2·0	57·1	6·5	91·2	91·2	1990		
1991	122	2·42	22	3·0	1	4·0	0	10·5	4·3	23·0	14·6	9·0	88·86	2·5	21·2	3·0	88·2	88·2	1991		
1992 B	15	0·32	58	11·5	7	12·5	2	22·0	35·3	3·5	7·6	20·0	65·84	3·5	65·2	0·5	85·2	85·2	1992 B		
1993	67	10·85	44	6·5	2	20·5	2	33·0	27·3	12·5	15·7	30·0	42·82	4·0	29·3	13·0	87·2	87·2	1993		
1994	119	7·75	80	1·0	17	6·0	2	8·5	26·3	21·5	23·7	7·5	76·80	4·0	73·3	9·5	84·2	84·2	1994		
1995	16	4·65	16	9·0	3	14·0	1	19·5	18·3	1·0	16·7	17·5	53·78	4·5	37·3	6·0	81·2	81·2	1995		
1996 B	68	2·55	52	4·5	18	0·5	1	31·5	10·3	11·0	24·8	28·5	30·76	6·0	1·4	3·5	78·2	78·2	1996 B		
1997	120	13·08	38	12·5	4	8·5	0	7·0	9·3	20·0	32·8	6·0	64·74	6·0	45·4	0·0	75·2	75·2	1997		
1998	13	9·98	75	7·5	0	16·0	2	18·0	1·3	29·0	40·9	16·0	41·72	6·5	9·5	12·5	77·2	77·2	1998		
1999	69	6·87	10	2·0	14	1·5	2	28·5	32·3	8·5	33·9	26·0	18·70	6·5	53·5	9·0	74·2	74·2	1999		
2000 B	121	4·77	46	11·0	1	10·5	2	5·0	31·3	18·5	42·0	4·5	52·68	8·0	17·0	6·5	71·2	71·2	2000 B		

* Add $\frac{1}{2}$ of the value for the year from table, P 29, Sect. VI and subtract 0·10.

TABLE 3 (cont.). Values of the Arguments for the beginnings of the years 1950 to 2000.

Arg.	58	59	60	61	62	63	64	65	66	67	69	Arg.	
Period	<i>d</i> 2190.5	<i>d</i> <i>c</i> 188.0 2	<i>d</i> <i>c</i> 14.5 12.5	<i>d</i> <i>c</i> 27.5 43	<i>d</i> <i>c</i> 9.5 64	<i>d</i> 32.13	<i>c</i> 35	<i>d</i> <i>c</i> 26.1 45	<i>d</i> <i>c</i> 27.6 42	Addition for Per. of Vert. Arg.			Period
Half day	<i>c</i> 5		<i>c</i> 171		<i>c</i> 53		<i>c</i> 205		<i>c</i> 6		<i>c</i> 2		Addition for Per. of Vert. Arg.
	<i>d</i>	<i>d</i> <i>c</i>	<i>d</i> <i>c</i>	<i>d</i> <i>c</i>	<i>d</i> <i>c</i>	<i>d</i>	<i>c</i>	<i>d</i> <i>c</i>	<i>d</i> <i>c</i>	<i>d</i> <i>c</i>	<i>d</i> <i>c</i>		
1950	648.9	129.5 2.79	14.0 151.4	21.5 41.0	5.0 136	4.25	0	2.8	43	12.7	39	1950	
1951	1014.0	118.0 3.77	7.5 104.4	24.0 12.1	3.0 164	15.84	29	2.4	26	19.2	23	1951	
1952 B	1380.0	107.5 4.74	2.0 57.3	27.0 36.2	2.0 192	28.43	23	3.0	9	26.7	7	1952 B	
1953	1745.0	96.5 0.71	10.0 135.3	1.5 17.3	0.5 15	7.89	23	2.6	37	5.7	34	1953	
1954	2110.0	85.0 1.69	3.5 88.2	3.5 41.4	8.0 107	19.48	17	2.2	20	12.2	18	1954	
1955	284.6	73.5 2.66	11.5 166.2	6.0 12.4	6.0 135	31.07	11	1.8	3	18.7	2	1955	
1956 B	650.6	63.0 3.63	6.0 119.1	0.0 36.5	5.0 163	11.53	10	2.3	31	26.2	28	1956 B	
1957	1015.6	51.5 4.61	14.5 26.0	11.5 7.6	3.0 191	23.12	4	1.9	15	5.1	13	1957	
1958	1380.6	40.5 0.58	7.5 150.0	13.5 31.7	1.5 14	2.58	4	1.5	43	11.6	39	1958	
1959	1745.7	29.0 1.55	1.0 102.9	16.0 2.8	0.0 106	14.17	33	1.1	26	18.1	23	1959	
1960 B	2111.7	18.5 2.53	10.5 9.9	10.0 26.8	8.0 134	26.76	27	1.7	9	23.6	7	1960 B	
1961	286.2	7.0 3.50	3.5 133.8	21.0 50.9	6.0 162	6.22	26	1.3	37	4.6	35	1961	
1962	651.2	184.0 1.47	12.0 40.8	23.5 22.0	4.0 190	17.82	20	0.9	20	11.1	18	1962	
1963	1016.3	172.5 2.45	5.0 104.7	25.5 46.1	2.5 13	29.41	14	0.5	4	17.6	2	1963	
1964 B	1382.3	162.0 3.42	14.5 71.7	1.0 27.2	1.5 40	9.87	14	1.1	3	25.1	28	1964 B	
1965	1747.3	150.5 4.40	8.0 24.6	3.0 51.2	9.0 132	21.46	8	0.7	15	4.0	14	1965	
1966	2112.3	139.5 0.37	1.0 148.6	5.5 22.3	7.0 160	0.92	8	0.3	43	10.5	39	1966	
1967	286.9	128.0 1.34	9.5 55.5	7.5 46.4	5.0 188	12.51	1	26.0	24	17.1	23	1967	
1968 B	652.9	117.5 2.32	4.0 8.4	11.0 17.5	4.5 11	25.10	30	0.5	9	24.6	7	1968 B	
1969	1017.9	106.0 3.29	12.0 86.4	13.0 41.6	2.5 39	4.56	30	0.1	38	3.5	35	1969	
1970	1383.0	94.5 4.26	5.5 39.3	15.5 12.7	0.5 67	16.15	24	25.8	19	10.0	19	1970	
1971	1748.0	83.5 0.24	13.5 117.3	17.5 36.7	8.0 159	27.74	18	25.4	2	16.5	2	1971	
1972 B	2114.0	73.0 1.21	8.0 70.2	21.0 7.8	7.0 187	8.20	18	26.0	30	24.0	28	1972 B	
1973	288.5	61.5 2.18	1.5 23.2	23.0 31.9	5.5 10	19.79	12	25.5	13	3.0	14	1973	
1974	653.6	50.0 3.16	9.5 101.1	25.5 3.0	3.5 38	31.38	5	25.1	41	9.5	40	1974	
1975	1018.6	38.5 4.13	3.0 54.1	27.5 27.1	1.5 66	10.84	5	24.7	25	16.0	24	1975	
1976 B	1384.6	28.5 0.10	12.0 132.0	3.0 8.1	0.5 94	23.43	34	25.3	8	23.5	7	1976 B	
1977	1749.6	17.0 1.08	5.5 85.0	5.0 32.2	8.0 186	2.89	34	24.9	36	2.4	35	1977	
1978	2114.7	5.5 2.95	13.5 162.9	7.5 3.3	6.5 9	14.48	28	24.5	19	8.9	19	1978	
1979	289.2	182.5 0.93	7.0 135.9	9.5 27.4	4.5 37	26.07	22	24.1	2	15.4	3	1979	
1980 B	655.2	172.0 1.90	1.5 68.8	12.5 51.5	3.5 65	6.53	21	24.7	30	22.9	28	1980 B	
1981	1020.2	160.5 1.97	9.5 149.8	15.0 22.5	1.5 93	18.12	15	24.3	13	1.9	14	1981	
1982	1385.3	149.0 2.95	3.0 99.7	17.0 46.6	9.0 185	20.71	9	23.9	42	8.4	40	1982	
1983	1750.3	137.5 3.92	11.5 6.6	10.5 17.7	7.5 8	9.17	0	23.5	25	14.9	24	1983	
1984 B	2116.3	127.0 4.89	5.5 130.6	22.5 41.8	6.5 36	21.76	3	24.1	8	22.4	8	1984 B	
1985	290.8	116.0 0.87	14.0 37.5	25.0 12.9	4.5 94	1.22	2	23.7	36	1.3	35	1985	
1986	655.9	104.5 1.84	7.0 161.5	27.0 37.0	2.5 92	12.81	31	23.3	19	7.8	19	1986	
1987	1020.9	93.0 2.82	0.5 114.4	1.5 18.0	0.5 120	24.40	25	22.9	2	14.3	3	1987	
1988 B	1386.9	82.5 3.79	10.0 21.4	4.5 42.1	9.5 7	4.86	25	23.5	31	21.9	29	1988 B	
1989	1751.9	71.0 4.76	3.0 145.3	7.0 13.2	7.5 35	16.45	19	23.1	14	0.8	14	1989	
1990	2117.0	60.0 0.74	11.5 52.3	9.0 37.3	5.5 63	28.04	13	22.6	42	7.3	40	1990	
1991	291.5	48.5 1.71	5.0 5.2	11.5 8.4	3.5 91	7.50	12	22.2	25	13.8	24	1991	
1992 B	657.5	38.0 2.68	14.0 83.2	14.5 32.4	2.5 119	20.09	6	22.8	8	21.3	8	1992 B	
1993	1022.5	26.5 3.66	7.5 30.1	17.0 3.5	0.5 147	31.68	0	22.4	36	0.2	36	1993	
1994	1387.6	15.0 4.63	0.5 160.1	19.0 27.6	8.5 34	11.14	0	22.0	20	6.8	19	1994	
1995	1752.6	4.0 0.61	9.0 67.0	21.0 51.7	6.5 62	22.74	29	21.6	3	13.3	3	1995	
1996 B	2118.6	181.5 3.58	3.5 20.0	24.5 22.8	5.5 90	3.20	29	22.2	31	20.8	29	1996 B	
1997	293.1	170.0 4.55	11.5 97.9	26.5 46.9	3.5 118	14.79	23	21.8	14	27.3	13	1997	
1998	658.2	159.0 0.53	5.0 50.8	1.0 27.9	1.5 146	26.38	16	21.4	42	6.2	40	1998	
1999	1023.2	147.5 1.50	13.0 128.8	3.0 52.0	9.5 32	5.84	16	21.0	25	12.7	24	1999	
2000 B	1389.2	137.0 2.48	7.5 81.7	6.5 23.1	8.5 60	18.43	10	21.6	9	20.2	8	2000 B	

TABLE 3 (cont.). Values of the Arguments for the beginnings of the years 1950 to 2000.

Arg.	69		70		71		72		73		74		75		76		77		78		Arg.
Period	<i>d</i>	<i>c</i>	<i>d</i>	Period																	
Addition for Per. of Vert. Arg.	<i>c</i>	Half day	<i>c</i>		Half day																
	<i>d</i>	<i>c</i>	<i>d</i>																		
1950	13·6	39	15·5	217·86	5·5	98·44	3·0	193·5	11·5	59·8	1·5	11	6·5	14·3	9·5	17·1	115·0			1950	
1951	18·6	23	22·5	125·84	21·0	4·41	3·0	15·6	7·5	17·8	9·5	1	1·0	1·4	1·5	0·2	10·0			1951	
1952 B	24·7	7	3·0	9·81	5·0	60·38	3·5	114·6	4·0	46·9	5·0	12	3·5	3·6	4·0	59·2	23·5			1952 B	
1953	2·0	35	9·5	137·79	20·0	75·35	3·0	213·6	0·0	4·9	0·0	9	5·0	5·7	6·0	53·3	35·5			1953	
1954	7·1	18	16·5	45·76	3·5	22·32	3·0	35·6	11·0	18·9	7·5	13	6·5	7·9	8·0	47·4	48·0			1954	
1955	12·1	2	23·0	173·74	18·5	37·28	2·5	134·6	6·5	47·0	2·5	9	0·5	54·1	0·0	30·3	60·5			1955	
1956 B	18·2	28	3·5	57·71	2·5	93·25	3·0	233·6	3·5	5·0	11·0	14	3·0	56·2	3·0	24·6	74·0			1956 B	
1957	23·2	12	10·0	185·69	17·5	108·22	3·0	55·7	14·5	18·1	6·0	10	4·5	58·4	5·0	18·7	86·0			1957	
1958	0·6	40	17·0	93·66	1·0	55·19	2·5	154·7	10·0	47·1	1·0	7	6·5	1·5	7·0	12·8	98·5			1958	
1959	5·6	24	24·0	1·64	16·0	70·16	2·0	253·7	6·0	5·1	8·5	11	0·5	47·7	9·0	6·8	111·0			1959	
1960 B	11·7	8	4·0	105·61	0·5	17·12	3·0	75·7	2·5	34·2	4·5	7	3·0	49·8	1·5	54·9	7·0			1960 B	
1961	16·7	34	11·0	133·59	15·5	32·09	2·5	174·7	13·5	47·2	12·0	12	4·5	52·0	3·5	49·0	19·0			1961	
1962	21·8	18	17·5	141·56	30·5	47·06	2·0	273·7	9·5	5·3	7·0	8	6·0	54·2	5·5	43·1	31·5			1962	
1963	26·8	1	24·5	49·34	13·5	103·03	2·0	95·8	5·0	34·3	2·0	5	0·5	41·3	7·5	37·2	44·0			1963	
1964 B	5·2	29	4·5	153·31	30·0	9·00	2·5	194·8	1·5	63·3	10·5	9	3·0	43·5	0·5	20·3	57·5			1964 B	
1965	10·2	13	11·5	61·49	13·0	64·96	2·5	16·8	13·0	5·4	5·5	5	4·5	45·7	2·5	14·4	69·5			1965	
1966	15·3	39	18·0	189·46	28·0	79·93	2·0	115·8	8·5	34·4	0·5	2	6·0	47·8	4·5	8·4	82·0			1966	
1967	20·3	23	25·0	97·44	11·5	26·90	1·5	214·8	4·0	63·5	8·0	6	0·5	35·0	6·5	2·5	94·5			1967	
1968 B	26·4	7	5·0	201·42	27·5	41·87	2·5	36·8	1·0	21·5	4·0	3	3·0	37·2	9·0	61·6	108·0			1968 B	
1969	3·7	35	12·0	109·39	10·5	97·83	2·0	135·9	12·0	34·5	11·5	7	4·5	39·3	1·0	44·7	2·5			1969	
1970	8·8	19	10·0	17·37	26·0	3·80	1·5	234·9	7·5	63·6	6·5	3	6·0	41·5	3·0	38·8	15·0			1970	
1971	13·8	3	25·5	145·34	9·0	59·77	1·5	56·9	3·5	21·6	1·5	0	0·5	28·6	5·0	32·9	27·5			1971	
1972 B	19·9	28	6·0	29·32	25·0	74·74	2·0	155·9	0·0	50·6	10·0	4	3·0	30·8	8·0	27·0	41·0			1972 B	
1973	24·9	12	12·5	157·30	8·5	21·70	1·5	254·9	11·0	63·7	5·0	1	4·5	33·0	0·0	10·0	53·0			1973	
1974	2·3	40	19·5	65·27	23·5	36·67	1·5	76·9	7·0	21·7	12·5	5	6·0	35·1	2·0	4·1	65·5			1974	
1975	7·3	24	26·0	193·25	6·5	92·04	1·0	176·0	2·5	50·8	7·5	1	0·5	22·2	3·5	63·2	78·0			1975	
1976 B	13·4	8	6·5	77·23	22·5	107·60	1·5	275·0	14·5	63·8	3·0	13	3·0	24·4	6·5	57·3	91·5			1976 B	
1977	18·4	34	13·0	205·20	6·0	54·57	1·5	97·0	10·5	21·8	11·0	2	4·5	26·6	8·5	51·4	103·5			1977	
1978	23·5	18	20·0	113·18	21·0	69·54	1·0	196·0	6·0	50·9	5·5	14	6·0	28·8	0·5	34·5	116·0			1978	
1979	0·8	4	27·0	21·16	4·5	165·50	1·0	18·0	2·0	8·9	0·5	10	0·5	15·9	2·5	28·5	11·0			1979	
1980 B	6·9	30	7·0	125·14	20·5	31·47	1·5	117·0	14·0	22·0	9·0	14	3·0	18·1	5·5	22·6	24·5			1980 B	
1981	11·9	13	14·0	33·11	3·5	87·44	1·0	216·1	9·5	51·0	4·0	11	4·5	20·3	7·5	16·7	36·5			1981	
1982	17·0	39	20·5	161·09	18·5	102·40	1·0	38·1	5·5	9·0	12·0	0	6·0	22·4	9·5	10·8	49·0			1982	
1983	22·0	23	0·0	45·07	2·0	49·37	0·5	137·1	1·0	38·1	6·5	12	0·5	9·6	1·0	58·9	61·5			1983	
1984 B	0·4	9	7·5	173·05	18·0	64·34	1·0	236·1	13·0	51·1	2·5	8	3·0	11·7	4·0	53·0	75·0			1984 B	
1985	5·4	35	14·5	81·02	1·5	11·30	1·0	58·1	9·0	9·2	10·0	12	4·5	13·9	6·0	47·1	87·0			1985	
1986	10·5	19	21·0	209·00	16·5	26·27	0·5	157·2	4·5	38·2	5·0	9	6·0	16·1	8·0	41·2	99·5			1986	
1987	15·3	3	0·5	92·98	31·5	41·24	0·0	256·2	0·0	67·2	8·0	5	0·5	3·2	0·0	24·2	112·0			1987	
1988 B	21·0	29	8·5	0·96	15·5	97·20	1·0	78·2	12·5	9·3	0·5	10	3·0	5·4	3·0	18·3	8·0			1988 B	
1989	26·6	13	15·0	128·94	31·0	3·17	0·5	177·2	8·0	38·3	3·5	6	4·5	7·5	5·0	12·4	20·0			1989	
1990	4·0	40	22·0	36·91	14·0	59·14	0·0	276·2	3·5	67·4	11·0	10	6·0	9·7	7·0	6·5	32·5			1990	
1991	9·0	24	1·0	140·89	29·0	74·10	0·0	98·2	15·0	9·4	6·0	7	0·0	55·9	9·0	0·6	45·0			1991	
1992 B	15·1	8	9·0	48·87	13·5	21·07	0·5	197·3	11·5	38·4	2·0	3	2·5	58·0	1·5	48·7	58·5			1992 B	
1993	20·1	34	15·5	176·85	28·5	36·04	0·5	19·3	7·0	67·5	9·5	8	4·5	1·2	3·5	42·7	71·0			1993	
1994	25·2	18	22·5	84·83	11·5	92·00	0·0	118·3	3·0	25·5	4·5	4	6·0	3·4	5·5	36·8	83·0			1994	
1995	2·5	4	1·5	188·80	26·5	106·97	9·5	3·3	14·0	38·6	12·0	8	0·0	49·5	7·5	30·9	95·5			1995	
1996 B	8·6	30	9·5	96·78	11·0	53·93	0·5	39·3	10·5	67·6	8·0	5	2·5	51·7	0·5	14·0	109·0			1996 B	
1997	13·6	14	16·5	4·76	26·0	68·90	0·0	138·3	6·5	25·6	3·0	1	4·0	53·8	2·5	8·1	4·0			1997	
1998	18·7	40	23·0	132·74	9·5	15·87	9·5	23·4	2·0	54·7	10·5	6	5·5	56·0	4·5	2·2	16·0			1998	
1999	23·7	23	2·5	16·72	24·5	30·83	9·0	122·4	13·0	67·7	5·5	2	0·0	43·2	6·0	61·3	28·5			1999	
2000 B	2·1	9	10·0	144·70	8·5	86·80	0·0	158·4	10·0	25·7	1·0	13	2·5	45·3	9·0	55·3	42·0			2000 B	

TABLE 3 (concl.). Values of the Arguments and of L, - α , π for the beginnings of the years 1950 to 2000.

Arg.	l'	79	80	81	82	83	84	L (a)	$-\alpha$ (a)	π	Arg.
Period	$\overset{d}{365.26}$	$\overset{c}{73}$	$\overset{c}{73}$	$\overset{c}{73}$	$\overset{d}{6800}$	$\overset{d}{6800}$	$\overset{d}{6800}$	1296 00000	1296 0000	1296 000	Period
Addition for Period of l'		$\overset{c}{45.66}$	$\overset{c}{66.85}$	$\overset{c}{34.19}$				(units of $0''.01$)	(units of $0''.1$)	(units of $1''$)	
1950	-2.53	69.66	29.52	64.16	1471	5075	3359	168 24750 + 7	1252 8599 - 1	751 636	1950
1951	-2.79	42.33	23.30	25.35	1836	5440	3725	634 03292 7	26 4413 1	898 021	1951
1952 B	-2.05	14.99	17.21	59.54	2202	5807	4091	1147 25336 7	96 2133 1	1044 806	1952 B
1953	-2.31	60.65	11.06	20.72	2567	6172	4456	317 03878 8	165 7947 1	1101 191	1953
1954	-2.57	33.32	4.90	54.91	2932	6537	4821	782 82420 8	235 3760 1	41 575	1954
1955	-2.83	5.98	71.75	10.10	3297	102	5186	1248 60962 8	304 9574 1	187 960	1955
1956 B	-2.09	51.64	65.00	50.29	3663	468	5552	465 83007 8	374 7294 1	334 745	1956 B
1957	-2.35	24.31	59.44	11.47	4028	833	5917	931 61549 8	444 3107 1	481 130	1957
1958	-2.60	69.97	53.29	45.66	4393	1198	6282	101 40091 8	513 8921 1	627 515	1958
1959	-2.86	42.64	47.13	6.85	4758	1563	6647	567 18634 8	583 4735 1	773 899	1959
1960 B	-2.12	15.30	40.98	41.04	5125	1929	213	1080 40679 9	653 2455 1	920 685	1960 B
1961	-2.38	60.96	34.83	2.22	5490	2294	579	250 19222 9	722 8268 1	1067 069	1961
1962	-2.64	33.63	28.67	36.41	5855	2660	944	715 97765 9	792 4081 1	1213 454	1962
1963	-2.90	6.29	22.52	70.60	6220	3025	1309	1181 76308 9	861 9895 1	63 838	1963
1964 B	-2.16	51.95	16.37	31.79	6586	3391	1675	398 98354 9	931 7615 1	210 624	1964 B
1965	-2.42	24.62	10.21	65.97	151	3756	2040	864 76898 9	1001 3428 1	357 008	1965
1966	-2.68	70.28	4.06	27.16	516	4121	2305	34 55441 9	1070 9242 1	503 393	1966
1967	-2.94	42.94	70.91	61.35	881	4486	2770	500 33985 10	1140 5055 1	649 777	1967
1968 B	-2.20	15.61	64.75	22.54	1247	4852	3136	1013 56032 10	1210 2775 1	796 563	1968 B
1969	-2.46	61.27	58.60	56.72	1612	5217	3502	183 34576 10	1279 8588 1	942 947	1969
1970	-2.72	33.93	52.44	17.91	1977	5582	3867	649 13120 10	53 4402 1	1089 332	1970
1971	-2.98	6.60	46.29	52.10	2343	5948	4232	1114 91664 10	123 0215 1	1235 716	1971
1972 B	-2.24	52.26	40.14	13.28	2709	6314	4598	332 13711 10	192 7935 1	86 501	1972 B
1973	-2.50	24.93	33.98	47.47	3074	6679	4963	797 92256 10	262 3748 1	232 886	1973
1974	-2.76	70.59	27.83	8.66	3439	244	5328	1263 70800 11	331 9561 1	379 270	1974
1975	-3.02	43.25	21.68	42.85	3804	609	5693	433 49345 11	401 5375 1	525 055	1975
1976 B	-2.28	15.92	15.52	4.93	4170	975	6059	946 71393 11	471 3094 1	672 440	1976 B
1977	-2.54	61.58	9.37	38.22	4535	1340	6424	116 49938 11	540 8908 1	818 825	1977
1978	-2.80	34.24	3.22	72.41	4900	1705	6789	582 28483 11	610 4721 1	965 209	1978
1979	-3.06	6.91	70.06	33.60	5265	2070	355	1048 07029 11	680 0534 1	1111 593	1979
1980 B	-2.32	52.57	63.91	67.78	5631	2437	721	265 29077 11	749 8254 1	1258 379	1980 B
1981	-2.58	25.23	57.75	28.97	5996	2802	1086	731 07622 12	819 4067 1	108 763	1981
1982	-2.84	70.90	51.60	63.16	6362	3167	1451	1196 86168 12	888 9880 1	255 148	1982
1983	-3.10	43.56	45.45	24.35	6727	3532	1816	366 64714 12	958 5693 1	401 532	1983
1984 B	-2.36	16.22	39.29	58.55	293	3898	2182	879 86763 12	1028 3413 1	548 317	1984 B
1985	-2.61	61.89	33.14	19.72	658	4263	2547	49 05309 12	1097 9226 1	694 702	1985
1986	-2.87	34.55	26.99	53.91	1023	4628	2912	515 43856 12	1167 5039 1	841 086	1986
1987	-3.13	7.22	30.83	15.09	1388	4993	3277	981 22402 12	1237 0852 1	987 470	1987
1988 B	-2.39	52.88	14.68	40.28	1754	5359	3643	198 44452 13	10 8572 1	1134 255	1988 B
1989	-2.65	25.54	8.53	10.47	2119	5724	4008	664 22999 13	80 4385 1	1280 640	1989
1990	-2.91	71.21	2.37	41.66	2484	6090	4374	1130 01546 13	150 0198 1	131 024	1990
1991	-3.17	43.87	69.22	5.84	2849	6455	4739	299 80093 13	219 6011 1	277 408	1991
1992 B	-2.43	16.53	63.06	40.03	3215	21	5105	813 02143 13	289 3730 1	424 194	1992 B
1993	-2.69	62.20	56.91	1.22	3580	386	5470	1278 80690 13	358 9543 1	570 578	1993
1994	-2.95	34.86	50.76	35.41	3946	751	5835	448 59238 13	428 5356 1	716 962	1994
1995	-3.21	7.52	41.60	69.59	4311	1116	6200	914 37785 14	498 1169 1	863 346	1995
1996 B	-2.47	53.19	38.45	30.78	4677	1482	6566	131 59836 14	567 8889 1	1010 132	1996 B
1997	-2.73	25.85	32.30	64.97	5042	1847	131	597 38384 14	637 4702 1	1156 516	1997
1998	-2.99	71.52	26.14	26.16	5407	2212	497	1063 16932 14	707 0515 1	6 900	1998
1999	-3.25	44.18	20.00	60.34	5772	862	5772	232 95480 14	776 6328 1	153 284	1999
2000 B	-2.51	16.84	13.84	21.53	6138	2944	1228	746 17531 + 14	846 4947 - 1	300 070	2000 B

TABLES OF THE MOON. SECT. II.

TABLE 4. Additions to L (units of $\sigma^{\circ}\Omega$), $-\Omega$ (units of $\sigma^{\circ}\Omega$), ω (units of r'') and to the Arguments for the days of the year.

Half daily motions. L = 23717°51417. $-\Omega$ = 95°3170. ω = 200°527.

Day	L	$-\Omega$									
0.0	0	0	30.0	127 05085	5 7190	60.0	254 10170	11 4380	90.0	381 15255	17 1574
.5	23 71751	953	.5	150 76836	5 8143	.5	277 81921	11 5334	.5	404 87006	17 2524
1.0	47 43593	1906	1.0	174 48588	5 9097	1.0	301 53073	11 6287	1.0	428 58758	17 3477
.5	71 15254	2860	.5	198 20339	6 0050	.5	325 25424	11 7240	.5	452 30509	17 4430
2.0	94 87006	3813	2.0	221 92091	6 1003	2.0	348 97176	11 8193	2.0	476 02261	17 5383
.5	118 58757	4766	.5	245 63842	6 1956	.5	372 68927	11 9146	.5	499 74012	17 6337
3.0	142 30509	5719	3.0	269 35594	6 2909	3.0	396 40679	12 0099	3.0	523 45764	17 7290
.5	166 02260	6672	.5	293 07345	6 3862	.5	420 12430	12 1053	.5	547 17515	17 8243
4.0	189 74011	7625	4.0	316 79096	6 4816	4.0	443 84181	12 2006	4.0	570 89266	17 9196
.5	213 45763	8579	.5	340 50848	6 5769	.5	467 55933	12 2959	.5	594 61018	18 0149
5.0	237 17514	9532	5.0	364 22599	6 6722	5.0	491 27684	12 3912	5.0	618 32769	18 1102
.5	260 89266	1 0485	.5	387 94351	6 7675	.5	514 99436	12 4865	.5	642 04521	18 2056
6.0	284 61017	1 1438	6.0	411 66102	6 8628	6.0	538 71187	12 5818	6.0	665 76272	18 3009
.5	308 32768	1 2391	.5	435 37853	6 9581	.5	562 42938	12 6772	.5	689 48023	18 3962
7.0	332 04520	1 3344	7.0	459 09605	7 0535	7.0	586 14690	12 7725	7.0	713 19775	18 4915
.5	355 76271	1 4298	.5	482 81356	7 1488	.5	609 86441	12 8678	.5	736 91526	18 5868
8.0	379 48023	1 5251	8.0	506 53108	7 2441	8.0	633 58193	12 9631	8.0	760 63278	18 6821
.5	403 19774	1 6204	.5	530 24859	7 3394	.5	657 29944	13 0584	.5	784 35029	18 7775
9.0	426 91526	1 7157	9.0	553 96611	7 4347	9.0	681 01696	13 1538	9.0	808 06781	18 8728
.5	450 63277	1 8110	.5	577 68362	7 5300	.5	704 73447	13 2491	.5	831 78532	18 9681
10.0	474 35028	1 9063	10.0	601 40113	7 6254	10.0	728 45198	13 3444	10.0	855 50283	19 0634
.5	498 06780	2 0017	.5	625 11865	7 7207	.5	752 16950	13 4397	.5	879 22035	19 1587
11.0	521 78531	2 0970	11.0	648 83616	7 8160	11.0	775 88701	13 5350	11.0	902 93786	19 2540
.5	545 50283	2 1923	.5	672 55368	7 9113	.5	799 60453	13 6303	.5	926 65538	19 3494
12.0	569 22034	2 2876	12.0	696 27119	8 0066	12.0	823 32204	13 7257	12.0	950 37289	19 4447
.5	592 93785	2 3829	.5	719 98870	8 1019	.5	847 03955	13 8210	.5	974 09040	19 5400
13.0	616 65537	2 4782	13.0	743 70622	8 1973	13.0	870 75707	13 9163	13.0	997 80792	19 6353
.5	640 37288	2 5736	.5	767 42373	8 2926	.5	894 47458	14 0116	.5	1021 52543	19 7306
14.0	664 09040	2 6689	14.0	791 14125	8 3879	14.0	918 19210	14 1069	14.0	1045 24295	19 8259
.5	687 80791	2 7642	.5	814 85876	8 4832	.5	941 90961	14 2022	.5	1068 96046	19 9213
15.0	711 52543	2 8595	15.0	838 57628	8 5785	15.0	965 62713	14 2976	15.0	1092 67798	20 0166
.5	735 24294	2 9548	.5	862 29379	8 6739	.5	989 34464	14 3929	.5	1116 39549	20 1119
16.0	758 96045	3 0501	16.0	886 01130	8 7692	16.0	1013 06215	14 4882	16.0	1140 11300	20 2072
.5	782 67797	3 1455	.5	909 72882	8 8645	.5	1036 77967	14 5835	.5	1163 83052	20 3025
17.0	806 39548	3 2408	17.0	933 44633	8 9598	17.0	1060 49718	14 6788	17.0	1187 54803	20 3978
.5	830 11300	3 3361	.5	957 16385	9 0551	.5	1084 21470	14 7741	.5	1211 26555	20 4931
18.0	853 83051	3 4314	18.0	980 88136	9 1504	18.0	1107 93221	14 8695	18.0	1234 98306	20 5885
.5	877 54802	3 5267	.5	1004 59887	9 2458	.5	1131 64972	14 9648	.5	1258 70057	20 6838
19.0	901 26554	3 6220	19.0	1028 31639	9 3411	19.0	1155 36723	15 0601	19.0	1282 41809	20 7791
.5	924 98305	3 7174	.5	1052 03390	9 4364	.5	1179 08474	15 1554	.5	1306 13560	20 8744
20.0	948 70057	3 8127	20.0	1075 75142	9 5317	20.0	1202 80225	15 2507	20.0	1329 85312	20 9697
.5	972 41808	3 9080	.5	1099 46893	9 6270	.5	1226 51976	15 3460	.5	1353 57063	21 0651
21.0	996 13560	4 0033	21.0	1123 18645	9 7223	21.0	1250 23727	15 4414	21.0	1377 28815	21 1604
.5	1019 85311	4 0986	.5	1146 90396	9 8177	.5	1273 95478	15 5367	.5	1401 00566	21 2557
22.0	1043 57062	4 1939	22.0	1170 62147	9 9130	22.0	1297 67229	15 6320	22.0	1424 72317	21 3510
.5	1067 28814	4 2892	.5	1194 33899	10 0083	.5	1321 38980	15 7273	.5	1448 44069	21 4463
23.0	1091 00565	4 3846	23.0	1218 05650	10 1036	23.0	1345 10731	15 8226	23.0	1472 15820	21 5417
.5	1114 72317	4 4799	.5	1241 77402	10 1989	.5	1368 82482	15 9179	.5	1495 87572	21 6370
24.0	1138 44068	4 5752	24.0	1265 49153	10 2942	24.0	1392 54233	16 0133	24.0	1519 59323	21 7323
.5	1162 15820	4 6705	.5	1289 20904	10 3895	.5	1416 25984	16 1086	.5	1543 31074	21 8276
25.0	1185 87571	4 7659	25.0	1312 92655	10 4849	25.0	1440 97735	16 2039	25.0	1567 02825	21 9229
.5	1209 59322	4 8612	.5	1336 64406	10 5802	.5	1464 69486	16 2992	.5	1590 74576	22 0182
26.0	1233 31074	4 9565	26.0	1360 36157	10 6755	26.0	1488 41237	16 3945	26.0	1614 46327	22 1135
.5	1257 02825	5 0518	.5	1384 07908	10 7708	.5	1512 12988	16 4898	.5	1638 18078	22 2088
27.0	1280 74577	5 1471	27.0	1407 79659	10 8661	27.0	1535 84739	16 5851	27.0	1661 89829	22 3041
.5	1304 46328	5 2424	.5	1431 51410	10 9614	.5	1559 56490	16 6804	.5	1685 61580	22 3994
28.0	1328 18079	5 3377	28.0	1455 23161	11 0567	28.0	1583 28241	16 7757	28.0	1709 33331	22 4947
.5	1351 89831	5 4331	.5	1478 94912	11 1520	.5	1607 00002	16 8710	.5	1733 05082	22 5900
29.0	1375 61582	5 5284	29.0	1502 66663	11 2473	29.0	1630 71753	16 9663	29.0	1756 76833	22 6853
.5	1399 33333	5 6237	.5	1526 38414	11 3426	.5	1654 43504	17 0616	.5	1780 48584	22 7806

TABLE 4 (cont.). Additions to L, - Ω for the days of the year.

Day	L	- Ω									
120°	508 20340	22 8761	150°	635 25425	28 5051	180°	762 30510	34 3141	210°	889 35595	40 0332
°5	531 92091	22 9714	°5	658 97176	28 6004	°5	786 02261	34 4095	°5	913 07346	40 1285
121°	555 03943	23 0667	151°	682 68028	28 7857	181°	809 74013	34 5048	211°	936 79098	40 2238
°5	579 35594	23 1620	°5	706 40679	28 8811	°5	833 45704	34 6001	°5	960 50849	40 3191
122°	603 07346	23 2574	152°	730 12431	28 9764	182°	857 17516	34 6954	212°	984 22661	40 4144
°5	626 79097	23 3527	°5	753 84182	29 0717	°5	880 80267	34 7907	°5	1007 94352	40 5097
123°	650 50849	23 4480	153°	777 55934	29 1670	183°	904 61019	34 8860	213°	1031 66104	40 6051
°5	674 22600	23 5433	°5	801 27685	29 2623	°5	928 32770	34 9814	°5	1055 37853	40 7004
124°	697 94351	23 6386	154°	824 99436	29 3576	184°	952 04521	35 0767	214°	1079 09666	40 7957
°5	721 66103	23 7339	°5	848 71188	29 4530	°5	975 76273	35 1720	°5	1102 81358	40 8910
125°	745 37854	23 8293	155°	872 42939	29 5483	185°	999 48024	35 2673	215°	1126 53109	40 9863
°5	769 09606	23 9246	°5	896 14691	29 6436	°5	1023 19776	35 3626	°5	1150 24861	41 0816
126°	792 81357	24 0199	156°	919 86442	29 7389	186°	1046 91527	35 4579	216°	1173 96612	41 1770
°5	816 53108	24 1152	°5	943 58193	29 8342	°5	1070 63278	35 5533	°5	1197 68363	41 2723
127°	840 24860	24 2105	157°	967 29945	29 9296	187°	1094 35030	35 6486	217°	1221 40115	41 3676
°5	863 96611	24 3058	°5	991 01696	30 0249	°5	1118 06781	35 7439	°5	1245 11866	41 4629
128°	887 68363	24 4012	158°	1014 73448	30 1202	188°	1141 78533	35 8392	218°	1268 83618	41 5582
°5	911 40114	24 4965	°5	1038 45199	30 2155	°5	1165 50284	35 9345	°5	1292 55369	41 6535
129°	935 11866	24 5918	159°	1062 16951	30 3108	189°	1189 22036	36 0298	219°	1316 27121	41 7488
°5	958 83617	24 6871	°5	1085 88702	30 4061	°5	1212 93787	36 1252	°5	43 98872	41 8442
130°	982 55368	24 7824	160°	1109 60453	30 5015	190°	1236 65538	36 2205	220°	67 70623	41 9395
°5	1006 27120	24 8777	°5	1133 32205	30 5968	°5	1260 37290	36 3158	°5	91 42375	42 0348
131°	1029 98871	24 9731	161°	1157 93956	30 6921	191°	1284 09041	36 4111	221°	115 14126	42 1301
°5	1053 70622	25 0684	°5	1180 75708	30 7874	°5	11 80793	36 5064	°5	138 85878	42 2255
132°	1077 42374	25 1637	162°	1204 47459	30 8827	192°	55 52544	36 6017	222°	162 57629	42 3208
°5	1101 14125	25 2590	°5	1228 19210	30 9780	°5	59 24295	36 6971	°5	186 29380	42 4161
133°	1124 85877	25 3543	163°	1251 90962	31 0734	193°	82 96047	36 7924	223°	210 01132	42 5114
°5	1148 57628	25 4497	°5	1275 62713	31 1687	°5	106 07798	36 8877	°5	233 72883	42 6067
134°	1172 29380	25 5450	164°	3 34465	31 2640	194°	130 39550	36 9830	224°	257 44635	42 7020
°5	1196 01131	25 6403	°5	27 06216	31 3593	°5	154 11301	37 0783	°5	281 16386	42 7974
135°	1219 72883	25 7356	165°	50 77968	31 4546	195°	177 83053	37 1736	225°	304 88138	42 8927
°5	1243 44634	25 8309	°5	74 49719	31 5499	°5	201 54804	37 2690	°5	328 59889	42 9880
136°	1267 16185	25 9262	166°	98 21470	31 6453	196°	225 26555	37 3643	226°	352 31690	43 0833
°5	1290 88137	26 0216	°5	121 93222	31 7406	°5	248 98307	37 4596	°5	376 03392	43 1786
137°	18 59888	26 1169	167°	145 64973	31 8359	197°	272 70058	37 5549	227°	399 75143	43 2739
°5	42 31640	26 2122	°5	169 36725	31 9312	°5	296 41810	37 6502	°5	423 46895	43 3693
138°	66 03391	26 3075	168°	193 08476	32 0265	198°	320 13561	37 7455	228°	447 18646	43 4646
°5	89 75142	26 4028	°5	216 80227	32 1218	°5	343 85312	37 8409	°5	470 90397	43 5599
139°	113 46894	26 4981	169°	240 51979	32 2172	199°	367 57064	37 9362	229°	494 62149	43 6552
°5	137 18645	26 5935	°5	264 23730	32 3125	°5	391 28815	38 0315	°5	518 33900	43 7505
140°	160 90397	26 6888	170°	287 95482	32 4078	200°	415 00567	38 1268	230°	542 05652	43 8458
°5	184 62148	26 7841	°5	311 67233	32 5031	°5	438 72318	38 2221	°5	565 77403	43 9412
141°	208 33900	26 8794	171°	335 38985	32 5984	201°	462 44070	38 3175	231°	589 49155	44 0365
°5	232 05651	26 9747	°5	359 10736	32 6937	°5	486 15821	38 4128	°5	613 20906	44 1318
142°	255 77402	27 0700	172°	382 82487	32 7891	202°	509 87572	38 5081	232°	636 92657	44 2271
°5	279 49154	27 1654	°5	406 54239	32 8844	°5	533 59324	38 6034	°5	660 64409	44 3224
143°	303 20905	27 2607	173°	430 25990	32 9797	203°	557 31075	38 6987	233°	684 36160	44 4177
°5	326 92657	27 3560	°5	453 97742	33 0750	°5	581 02827	38 7940	°5	708 07912	44 5131
144°	350 64408	27 4513	174°	477 69493	33 1703	204°	604 74578	38 8894	234°	731 79663	44 6084
°5	374 39159	27 5466	°5	501 41244	33 2656	°5	628 46329	38 9847	°5	755 51414	44 7037
145°	398 07911	27 6419	175°	525 12996	33 3610	205°	652 18081	39 0800	235°	779 23166	44 7990
°5	421 79662	27 7373	°5	548 84747	33 4563	°5	675 89832	39 1753	°5	802 94917	44 8943
146°	445 51414	27 8326	176°	572 56499	33 5516	206°	699 61584	39 2706	236°	826 66669	44 9896
°5	469 23165	27 9279	°5	596 28250	33 6469	°5	723 33335	39 3659	°5	850 38420	45 0850
147°	492 94917	28 0232	177°	620 00002	33 7422	207°	747 05087	39 4613	237°	874 10172	45 1803
°5	516 66668	28 1185	°5	643 71753	33 8376	°5	770 76838	39 5566	°5	897 81923	45 2756
148°	540 38419	28 2138	178°	667 43504	33 9329	208°	794 48580	39 6519	238°	921 53674	45 3709
°5	564 10171	28 3092	°5	691 15256	34 0282	°5	818 20241	39 7472	°5	945 25426	45 4662
149°	587 81022	28 4045	179°	714 87007	34 1235	209°	842 92092	39 8425	239°	968 97175	45 5615
°5	611 53074	28 4998	°5	738 58759	34 2188	°5	865 63844	39 9378	°5	992 68929	45 6569

27 A.D		26 A.D		59 A.D.	-2400
D	17.5627	16.9188		D	-0.00,113
1	43.79	47.99		1	+0.00,003
2	10.5	36.9		2	-0.00,37
3	64.27	31.5		3	+0.00,28
4	102.14	16.42		4	-0.00,58
5	25.9	37.8		5	-0.00,60
6	49.9	76.13		6	-0.00,31
7	86.5	78.47		7	+0.00,24
12	9.6	12.56		12	-0.00,03
16	189.9	224.91		16	-0.00,596
17	16.9	14.65		17	+0.00,04
18	3.4	6.95		18	-0.00,06
19	43.7	29.72		19	+0.00,24
23	9.0 389.4	8.0 267.7		71	-0.33,66
24	10.5 5.9	10.0 99.7		33	-0.02,19
25	10.5 71.3	14.0 144.7		72	+0.14,08
26	8.0 114.8	11.0 7.76		73	-0.18,9
27	26.0 185.0	19.5 163.2		74	-0.01,6
28	4.5 0.0	4.5 155.5		76	-0.05,2
29	26.0 36.9	22.0 98.7		77	+0.10,6
30	23.0 270.12	26.5 71.1	59 A.D.		
31	13.5 78.6	12.5 288	D		
32	2.0 233.2	29.0 54.1	1		
33	2.5 11.8	1.5 81.6	2		
34	159.5 5.5	11.0 2.3	3		
35	7.0 239.9	8.0 72.4	4		
36	6.0 77.2	1.0 58.9	5		
37	2.0 393.0	10.5 24.4	6		
38	4.0 262.3	5.5 169.4	7		
39	5.0 31.8	5.5 11.7	12		
40	10.0 297.4	9.0 141	16		
41	103.0 16.1	95.0 0.3	17		
42	24.5 73.3	19.0 44.9	18		
43	5.5 54.6	14.5 178.9	19		
44	6.5 65.2	5.5 79.9	71		
45	10.0 113.5	17.5 15.8	33		
46	3.0 28.9	4.0 23.4	72		
47	207.0 15.3	217.5 3.2	73		
53	29.5 35.5	29.0 4.1	74		
54	29.0 9.2	30.0 0.6	76		
55	5.0 72.5	5.0 92.6	77		
56	3.0 66.4	2.5 79.6			
57	7.5 69.6	5.0 65.1			
58	1446.8	1091			
59	35.0 0.23	56.0 4.6			
60	0.0 66.8	1.5 156.6			
61	19.0 24.6	27.0 0.0			
62	8.0 136	0.5 181			
71	23.0 179.6	26.5 46.9			
72	10.0 65.6	5.0 48.7			
73	9.5 186.5	0.5 233			
74	13.0 24.4	12.0 10.2			
76	6.0 26.0	7.5 8.1			
77	5.0 2.2	2.5 61.2			
82	6212 P22	5857			
83	2938	2583			
84	1229	874			
L	85130	93177			
Ω	887594	792915			
ω	319928	177535			

28 A.D.	s.v.	Periods	δ 0.271 δ (13/24)	Sums
D	- .000051	29.5306	0.261 C	16.675
1	+ .00003	141	} Period	50.98 28
2	- .0016	156		7.87 A.D.
3	+ .0013	116		78.04
4	- .0026	124		91.67
5	- .0028	128		2.06
6	- .0014	132		54.38
7	+ .0011	100		3.43
12	- .0002	24		14.33
16	- .00269	251		172.9
17	+ .0002	51		27.9
18	- .0003	38	8.95	
19	+ .0011	76	65.21	
23	- .065	599	324.5 δ 7.5	181.9 c
24	- .016	167	90.5	118.2
25	- .121	189	102.4	140.9
26	- .1069	142	76.9	135.4
27	+ .163	258	139.95	27.5
28	- .056	178	96.42	155.9
29	+ .111	207	112.13	73
30	- .22838	330	178.75	102.3
31	- .0298	294	159.25	144.6
32	+ .195	335	181.45	77
33	- .01	98	53.08	33.8
34	- .1252	14	7.58	11.7
35	- .0852	277	150.03	218.3
36	+ .068	117	63.4	22.5
37	+ .045	396	214.5	297.9
38	- .122	299	162	51
39	- .007	31	16.8	14.3
40	+ .0015	311	168.45	10.5
41	+ .026	21	11.4	11.6
42	+ .104	152	82.3	23.4
43	- .043	189	102.4	37.4
44	- .008	179	97	113.7
45	+ .024	133	72	54.2
46	- .023	68	36.8	50.2
47	+ .0011	25	13.54	2.8
53	- .01	39	21.1	35.2
54	- .01	47	25.5	3.2
55	- .0295	130	70.41	109
56	- .011	80	43.3	70
57	+ .02	112	60.7	63.9
58	+ .028	3	.3	1829.9
59	- .017	5	3	1.6
60	- .082	171	92.6	22.9
61	- .075	53	28.7	6.6
62	- .11	205	111	40
71	- .1526	220	119.16	66.7
72	+ .0635	109	59.04	14.8
73	- .085	277	150	164.8
74	- .008	71	38.5	70.8
76	- .024	59	32	43.3
77	+ .007	65	35.2	40.6
82	+ .01	6800		6595
83	+ .05	6800		3321
84	+ .05	6800		1612
L	- 2.6395	1296000	23717.51	109210 "
- Ω	+ 2.755	1296000	95.317	933612 "
+ ω	+ 13.64	1296000	200.527	473550 "

half day motions

TABLE 4 (cont.). Additions to L, - Ω for the days of the year.

Day	L	- Ω									
240.0	1016 40680	45 7522	270.0	1143 45765	51 4712	300.0	1270 50850	57 1902	330.0	101 55935	62 9992
.5	1040 12431	45 8475	.5	1167 17516	51 5665	.5	1204 22601	57 2855	.5	125 27687	63 0046
241.0	1063 84183	45 9428	271.0	1190 89268	51 6618	301.0	21 94353	57 3809	331.0	148 99438	63 0999
.5	1087 55934	46 0381	.5	1214 61019	51 7572	.5	45 66104	57 4762	.5	172 71189	63 1952
242.0	1111 27686	46 1334	272.0	1238 32771	51 8525	302.0	69 37856	57 5715	332.0	196 42941	63 2905
.5	1134 99437	46 2288	.5	1262 04522	51 9478	.5	93 09607	57 6668	.5	220 14692	63 3858
243.0	1158 71189	46 3241	273.0	1285 76274	52 0431	303.0	116 81359	57 7621	333.0	243 86444	63 4812
.5	1182 42940	46 4194	.5	13 48025	52 1384	.5	140 53110	57 8574	.5	267 58195	63 5765
244.0	1206 14691	46 5147	274.0	37 19776	52 2337	304.0	164 24861	57 9528	334.0	291 29946	63 6718
.5	1229 86443	46 6100	.5	60 91528	52 3291	.5	187 96613	58 0481	.5	315 01698	63 7671
245.0	1253 58194	46 7054	275.0	84 63279	52 4244	305.0	211 68364	58 1434	335.0	338 73449	63 8624
.5	1277 29946	46 8007	.5	108 35031	52 5197	.5	235 40116	58 2387	.5	362 45201	63 9577
246.0	5 01697	46 8960	276.0	132 06782	52 6150	306.0	259 11867	58 3340	336.0	386 16952	64 0531
.5	28 73448	46 9913	.5	155 78533	52 7103	.5	282 83618	58 4293	.5	409 88704	64 1484
247.0	52 45200	47 0866	277.0	179 50285	52 8056	307.0	306 55370	58 5247	337.0	433 60455	64 2437
.5	76 16951	47 1819	.5	203 22036	52 9010	.5	330 27121	58 6200	.5	457 32206	64 3390
248.0	99 88703	47 2773	278.0	226 93788	52 9963	308.0	353 98873	58 7153	338.0	481 03958	64 4343
.5	123 60454	47 3726	.5	250 65539	53 0916	.5	377 70624	58 8106	.5	504 75709	64 5296
249.0	147 32206	47 4679	279.0	274 37291	53 1869	309.0	401 42376	58 9059	339.0	528 47461	64 6250
.5	171 03957	47 5632	.5	298 09042	53 2822	.5	425 14127	59 0013	.5	552 19212	64 7203
250.0	194 75708	47 6585	280.0	321 80793	53 3775	310.0	448 85878	59 0966	340.0	575 90063	64 8156
.5	218 47460	47 7538	.5	345 52545	53 4729	.5	472 57630	59 1919	.5	599 62715	64 9109
251.0	242 19211	47 8492	281.0	369 24296	53 5682	311.0	496 29381	59 2872	341.0	623 34466	65 0062
.5	265 90963	47 9445	.5	392 96048	53 6635	.5	520 01133	59 3825	.5	647 06218	65 1015
252.0	289 62714	48 0398	282.0	416 67799	53 7588	312.0	543 72884	59 4778	342.0	670 77969	65 1969
.5	313 34465	48 1351	.5	440 39550	53 8541	.5	567 44636	59 5732	.5	694 49721	65 2922
253.0	337 06217	48 2304	283.0	464 11302	53 9494	313.0	591 16387	59 6685	343.0	718 21472	65 3875
.5	360 77968	48 3257	.5	487 83053	54 0448	.5	614 88138	59 7638	.5	741 93223	65 4828
254.0	384 49720	48 4211	284.0	511 54805	54 1401	314.0	638 59890	59 8591	344.0	765 64975	65 5781
.5	408 21471	48 5164	.5	535 26556	54 2354	.5	662 31641	59 9544	.5	789 36726	65 6734
255.0	431 93223	48 6117	285.0	558 98308	54 3307	315.0	686 03393	60 0497	345.0	813 08478	65 7688
.5	455 64974	48 7070	.5	582 70059	54 4260	.5	709 75144	60 1451	.5	836 80229	65 8641
256.0	479 36725	48 8023	286.0	606 41810	54 5213	316.0	733 46895	60 2404	346.0	860 51980	65 9594
.5	503 08477	48 8976	.5	630 13562	54 6167	.5	757 18647	60 3357	.5	884 23732	66 0547
257.0	526 80228	48 9930	287.0	653 85313	54 7120	317.0	780 90398	60 4310	347.0	907 95483	66 1500
.5	550 51980	49 0883	.5	677 57065	54 8073	.5	804 62150	60 5263	.5	931 67235	66 2453
258.0	574 23731	49 1836	288.0	701 28816	54 9026	318.0	828 33901	60 6216	348.0	955 38986	66 3407
.5	597 95482	49 2789	.5	725 00567	54 9979	.5	852 05653	60 7170	.5	979 10738	66 4360
259.0	621 67234	49 3742	289.0	748 72319	55 0933	319.0	875 77404	60 8123	349.0	1002 82489	66 5313
.5	645 38985	49 4695	.5	772 44070	55 1886	.5	899 49155	60 9076	.5	1026 54240	66 6266
260.0	669 10737	49 5649	290.0	796 15822	55 2839	320.0	923 20907	61 0029	350.0	1050 25992	66 7219
.5	692 82488	49 6602	.5	819 87573	55 3792	.5	946 92658	61 0982	.5	1073 97743	66 8172
261.0	716 54240	49 7555	291.0	843 59325	55 4745	321.0	970 64410	61 1935	351.0	1097 69495	66 9126
.5	740 25991	49 8508	.5	867 31076	55 5698	.5	994 36161	61 2889	.5	1121 41246	67 0079
262.0	763 97742	49 9461	292.0	891 02827	55 6652	322.0	1018 07912	61 3842	352.0	1145 12997	67 1032
.5	787 69494	50 0414	.5	914 74579	55 7605	.5	1041 79664	61 4795	.5	1168 84749	67 1985
263.0	811 41245	50 1368	293.0	938 46330	55 8558	323.0	1065 51415	61 5748	353.0	1192 56500	67 2938
.5	835 12997	50 2321	.5	962 18082	55 9511	.5	1089 23167	61 6701	.5	1216 28252	67 3892
264.0	858 84748	50 3274	294.0	985 89833	56 0464	324.0	1112 94918	61 7654	354.0	1240 00003	67 4845
.5	882 56499	50 4227	.5	1009 61584	56 1417	.5	1136 66670	61 8608	.5	1263 71755	67 5798
265.0	906 28251	50 5180	295.0	1033 33336	56 2371	325.0	1160 38421	61 9561	355.0	1287 43506	67 6751
.5	930 00002	50 6134	.5	1057 05087	56 3324	.5	1184 10173	62 0514	.5	15 15257	67 7704
266.0	953 71754	50 7087	296.0	1080 76839	56 4277	326.0	1207 81924	62 1467	356.0	38 87009	67 8657
.5	977 43505	50 8040	.5	1104 48590	56 5230	.5	1231 53675	62 2420	.5	62 58760	67 9611
267.0	1001 15257	50 8993	297.0	1128 20342	56 6183	327.0	1255 25427	62 3373	357.0	86 30512	68 0564
.5	1024 87008	50 9946	.5	1151 92093	56 7136	.5	1278 97178	62 4327	.5	110 02263	68 1517
268.0	1048 58759	51 0899	298.0	1175 63844	56 8090	328.0	6 68929	62 5280	358.0	133 74914	68 2470
.5	1072 30511	51 1853	.5	1199 35596	56 9043	.5	30 40681	62 6233	.5	157 45766	68 3423
269.0	1096 02262	51 2806	299.0	1223 07347	56 9996	329.0	54 12432	62 7186	359.0	181 17517	68 4376
.5	1119 74014	51 3759	.5	1246 79099	57 0949	.5	77 84184	62 8139	.5	204 89269	68 5330

TABLE 4 (cont.). Additions to L, - Ω, ω and to the Arguments for the days of the year.

Day	L	- Ω	Day	ω	Day	ω	Day	ω
360 ^o	228 61020	68 6283	0	0	130	52 137	260	104 274
5	252 32772	68 7236	10	4 011	140	56 148	270	108 285
361 ^o	276 04523	68 8189	20	8 021	150	60 158	280	112 295
5	299 70274	68 9142	30	12 032	160	64 169	290	116 306
362 ^o	323 48026	69 0095	40	16 042	170	68 179	300	120 316
5	347 19777	69 1049	50	20 053	180	72 190	310	124 327
363 ^o	370 91529	69 2002	60	24 063	190	76 200	320	128 338
5	394 63280	69 2955	70	28 074	200	80 211	330	132 348
364 ^o	418 35031	69 3908	80	32 084	210	84 221	340	136 359
5	442 06783	69 4861	90	36 095	220	88 232	350	140 369
365 ^o	465 78534	69 5814	100	40 105	230	92 243	360	144 380
5	489 50286	69 6768	110	44 116	240	96 253	370	148 390
366 ^o	513 22037	69 7721	120	48 127	250	100 264		

Arg.	D	1	2	3	4	5	6	7	8	9	10	Arg.
<i>d</i>	<i>d</i>	<i>c</i>	<i>d</i>									
0	0.0000	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0
30	0.4694	11.400	23.80	1.06	27.81	8.01	30.81	9.00	14.80	5.64	20.10	30
60	0.9388	22.799	47.60	2.12	55.62	16.02	61.62	18.00	29.60	11.28	40.20	60
90	1.4082	34.199	71.40	3.18	83.43	24.03	92.43	26.99	44.40	16.92	60.30	90
120	1.8776	45.598	95.20	4.24	111.24	32.04	123.24	35.99	9.20	22.56	0.40	120
150	2.3471	56.998	119.00	5.30	15.05	40.05	22.05	44.99	24.00	28.20	20.50	150
180	2.8165	68.398	142.80	6.36	42.86	48.06	52.86	53.99	38.80	33.84	40.59	180
210	3.2859	79.797	10.60	7.42	70.67	56.07	83.67	62.99	3.60	39.48	60.69	210
240	3.7553	91.197	34.40	8.48	98.48	64.08	114.48	71.99	18.40	3.12	0.70	240
270	4.2247	102.596	58.20	9.54	2.29	72.09	13.29	80.98	33.20	8.76	20.89	270
300	4.6941	113.996	82.00	10.60	30.10	80.10	44.10	89.98	47.99	14.40	40.99	300
330	5.1635	125.396	105.80	11.66	57.91	88.11	74.91	98.98	12.79	20.04	61.09	330
360	5.6329	136.795	120.60	12.72	85.72	96.12	105.72	7.98	27.59	25.68	1.19	360

Arg.	11	12	13	14	15	16	17	18	19	20	21	22	Arg.
<i>d</i>	<i>c</i>	<i>d</i>											
0	0.00	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.00	0.00	0.00	0.00	0
30	3.94	7.75	7.90	5.16	0.50	18.000	8.69	9.20	7.50	29.50	1.51	13.88	30
60	7.88	15.50	15.80	10.32	1.00	36.000	17.38	18.40	15.00	59.00	3.02	27.76	60
90	11.82	23.25	23.70	15.48	1.50	54.000	26.07	27.60	22.50	88.50	4.53	5.64	90
120	15.76	7.00	31.60	20.64	2.00	72.001	34.76	36.80	30.00	24.00	6.04	19.52	120
150	19.70	14.75	39.50	25.80	2.50	90.001	43.45	8.00	37.50	53.49	7.55	33.40	150
180	23.64	22.51	3.39	30.96	3.00	108.001	1.14	17.20	45.00	82.99	9.06	11.28	180
210	27.58	6.26	11.29	4.12	3.49	126.001	9.83	20.40	52.50	18.49	10.57	25.15	210
240	31.52	14.01	19.19	9.28	3.99	144.001	18.52	35.60	60.00	47.99	12.08	3.03	240
270	35.46	21.76	27.09	14.44	4.49	162.001	27.21	6.80	67.50	77.49	13.59	16.91	270
300	39.40	5.51	34.99	19.60	4.99	180.001	35.90	16.00	75.00	12.99	15.10	30.79	300
330	43.34	13.26	42.89	24.76	5.49	198.001	44.59	23.20	6.49	42.49	16.61	8.67	330
360	3.28	21.01	6.79	29.92	5.99	216.002	2.28	34.40	13.99	71.99	18.12	22.55	360

TABLE 4 (cont.). Additions to the Arguments for the days of the year.

Arg.	23		24		25		26		27		28		29		30		31		Arg.
d	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
10	10.0	0	10.0	0	10.0	0	10.0	0	10.0	0	0.0	45	10.0	0	10.0	0	10.0	0	10
20	4.5	135	5.5	103	20.0	0	20.0	0	20.0	0	0.0	90	20.0	0	20.0	0	5.0	138	20
30	14.5	135	1.5	39	4.0	143	0.0	56	30.0	0	0.0	135	0.5	98	2.0	294	0.0	276	30
40	9.0	270	11.5	39	14.0	143	10.0	56	5.0	79	0.5	2	10.5	98	12.0	294	10.0	276	40
50	3.5	495	7.0	142	24.0	143	20.0	56	15.0	79	0.5	47	20.5	98	22.0	294	5.5	120	50
60	13.5	495	3.0	78	8.5	97	0.0	112	25.0	79	0.5	92	1.0	196	4.5	258	0.5	258	60
70	8.0	540	13.0	78	18.5	97	10.0	112	0.0	158	0.5	137	11.0	196	14.5	258	10.5	258	70
80	3.0	76	9.0	14	3.0	51	20.0	112	10.0	158	1.0	4	21.0	196	24.5	258	6.0	102	80
90	13.0	76	4.5	117	13.0	51	0.5	26	20.0	158	1.0	49	2.0	87	7.0	222	1.0	240	90
100	7.5	211	0.5	53	23.0	51	10.5	26	30.0	158	1.0	94	12.0	87	17.0	222	11.0	240	100
110	2.0	346	10.5	53	7.5	5	20.5	26	5.0	237	1.0	139	22.0	87	27.0	222	6.5	84	110
120	12.0	346	6.0	156	17.5	5	0.5	82	15.0	237	1.5	6	2.5	185	9.5	186	1.5	222	120
130	6.5	481	2.0	92	1.5	148	10.5	82	25.0	237	1.5	51	12.5	185	19.5	186	11.5	222	130
140	1.5	17	12.0	92	11.5	148	20.5	82	0.5	58	1.5	96	22.5	185	2.0	150	7.0	66	140
150	11.5	17	8.0	28	21.5	148	0.5	138	10.5	58	1.5	141	3.5	76	12.0	150	2.0	204	150
160	6.0	152	3.5	131	6.0	102	10.5	138	20.5	58	2.0	8	13.5	76	22.0	150	12.0	204	160
170	0.5	287	13.5	131	16.0	102	20.5	138	30.5	58	2.0	53	23.5	76	4.5	114	7.5	48	170
180	10.5	287	9.5	67	0.5	56	1.0	52	5.5	137	2.0	98	14.5	114	14.5	114	2.5	186	180
190	5.0	422	5.5	3	10.5	56	11.0	52	15.5	137	2.0	143	14.0	174	24.5	114	12.5	186	190
200	15.0	422	1.0	106	20.5	56	21.0	52	25.5	137	2.5	10	24.0	174	7.0	78	8.0	30	200
210	9.5	557	11.0	106	5.0	10	1.0	108	0.5	216	2.5	55	5.0	65	17.0	78	3.0	168	210
220	4.5	93	7.0	42	15.0	10	11.0	108	10.5	216	2.5	100	15.0	65	27.0	78	13.0	168	220
230	14.5	93	2.5	145	25.0	10	21.0	108	20.5	216	2.5	145	25.0	65	9.5	42	8.5	12	230
240	9.0	228	12.5	145	9.0	153	1.5	22	30.5	216	3.0	12	5.5	163	19.5	42	3.5	150	240
250	3.5	363	8.5	81	19.0	153	11.5	22	6.0	37	3.0	57	15.5	163	2.0	6	13.5	150	250
260	13.5	363	4.5	17	3.5	107	21.5	22	16.0	37	3.0	102	25.5	163	12.0	6	8.5	288	260
270	8.0	498	0.0	120	13.5	107	1.5	78	26.0	37	3.0	147	6.5	54	22.0	6	4.0	132	270
280	3.0	34	10.0	120	23.5	107	11.5	78	1.0	116	3.5	14	16.5	54	4.0	300	14.0	132	280
290	13.0	34	6.0	56	8.0	61	21.5	78	11.0	116	3.5	59	14.0	300	14.0	300	9.0	270	290
300	7.5	169	1.5	159	18.0	61	1.5	134	21.0	116	3.5	104	7.0	152	24.0	300	4.5	114	300
310	2.0	304	11.5	159	2.5	15	11.5	134	31.0	116	3.5	149	17.0	152	6.5	264	14.5	114	310
320	12.0	304	7.5	95	12.5	15	21.5	134	6.0	195	4.0	16	27.0	152	16.5	264	9.5	252	320
330	6.5	439	3.5	31	22.5	15	2.0	48	16.0	195	4.0	61	8.0	43	26.5	264	5.0	96	330
340	1.0	574	13.5	31	6.5	158	12.0	48	26.0	195	4.0	106	18.0	43	9.0	228	0.0	234	340
350	11.0	574	9.0	134	16.5	158	22.0	48	1.5	16	4.0	151	28.0	43	19.0	228	10.0	234	350
360	6.0	110	5.0	70	1.0	112	2.0	104	11.5	16	4.5	18	8.5	141	1.5	192	5.5	78	360

Arg.	32		33		34		35		36		37		38		39		40		Arg.
d	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
10	10.0	0	10.0	0	10.0	0	0.0	214	10.0	0	10.0	0	2.5	223	4.0	11	10.0	0	10
20	20.0	0	20.0	0	20.0	0	0.5	151	4.0	22	9.5	329	5.5	147	2.5	2	6.0	245	20
30	30.0	0	0.0	92	30.0	0	1.0	88	14.0	22	9.5	262	1.0	294	0.5	24	2.5	179	30
40	8.0	126	10.0	92	40.0	0	1.5	25	8.0	44	9.5	195	4.0	218	5.0	4	12.5	179	40
50	18.0	126	20.0	92	50.0	0	1.5	239	2.0	66	9.5	128	0.0	66	3.0	26	9.0	113	50
60	28.0	126	0.5	86	60.0	0	2.0	176	12.0	66	9.5	61	2.5	289	1.5	17	5.5	47	60
70	6.0	252	10.5	86	70.0	0	2.5	113	6.0	88	9.0	390	5.5	213	0.0	8	1.5	292	70
80	16.0	252	20.5	86	80.0	0	3.0	50	0.0	110	9.0	323	1.5	61	4.0	10	11.5	292	80
90	26.0	252	1.0	80	90.0	0	3.0	204	10.0	110	9.0	256	4.0	284	2.5	10	8.0	226	90
100	4.5	43	11.0	80	100.0	0	3.5	201	4.5	15	9.0	189	0.0	132	1.0	1	4.5	160	100
110	14.5	43	21.0	80	110.0	0	4.0	138	14.5	15	9.0	122	3.0	56	5.0	12	1.0	94	110
120	24.5	43	1.5	74	120.0	0	4.5	75	8.5	37	9.0	55	5.5	279	3.5	3	11.0	94	120
130	2.5	169	11.5	74	130.0	0	5.0	12	2.5	59	8.5	384	1.5	127	1.5	25	7.5	28	130
140	12.5	169	21.5	74	140.0	0	5.0	226	12.5	59	8.5	317	4.5	51	0.0	16	3.5	273	140
150	22.5	169	2.0	68	150.0	0	5.5	163	6.5	81	8.5	250	0.0	198	4.0	27	0.0	207	150
160	0.5	295	12.0	68	160.0	0	6.0	100	0.5	103	8.5	183	3.0	122	2.5	18	10.0	207	160
170	10.5	295	22.0	68	170.0	0	6.5	37	10.5	103	8.5	116	6.0	46	1.0	9	6.5	141	170
180	20.5	295	2.5	62	180.0	0	6.5	231	5.0	8	8.5	49	1.5	193	5.0	20	3.0	75	180
190	30.5	295	12.5	62	190.0	0	7.0	188	15.0	8	8.0	378	4.5	117	3.5	11	13.0	75	190
200	9.0	86	22.5	62	200.0	0	7.5	125	9.0	30	8.0	311	0.0	264	2.0	2	9.5	9	200
210	19.0	86	3.0	56	4.0	3	8.0	62	3.0	52	8.0	244	3.0	188	0.0	24	5.5	254	210
220	29.0	86	13.0	56	14.0	3	8.0	276	13.0	52	8.0	177	6.0	112	4.5	4	2.0	188	220
230	7.0	212	23.0	56	24.0	3	8.5	213	7.0	74	8.0	110	1.5	259	2.5	26	12.0	188	230
240	17.0	212	3.5	50	34.0	3	9.0	150	1.0	96	8.0	43	4.5	183	1.0	17	8.5	122	240
250	27.0	212	13.5	50	44.0	3	0.0	24	11.0	96	7.5	372	0.5	31	5.0	28	5.0	56	250
260	5.5	3	23.5	50	54.0	3	0.5	238	5.5	1	7.5	305	3.0	254	3.5	19	1.0	301	260
270	15.5	3	4.0	44	64.0	3	0.5	175	15.5	1	7.5	238	0.0	178	2.0	10	11.0	301	270
280	25.5	3	14.0	44	74.0	3	1.0	112	9.5	23	7.5	171	2.0	26	0.5	1	7.5	235	280
290	3.5	129	24.0	44	84.0	3	1.5	49	3.5	45	7.5	104	4.5	249	4.5	12	4.0	169	290
300	13.5	129	4.5	38	94.0	3	1.5	203	13.5	45	7.5	37	9.5	97	3.0	3	0.5	103	300
310	23.5	129	14.5	38	104.0	3	2.0	200	7.5	07	7.0	306	3.5	21	1.0	25	10.5	103	310
320	1.5	255	24.5	38	114.0	3	2.5	137	1.5	89	7.0	299	6.0	244	5.5	5	7.0	37	320
330	11.5	255	5.0	32	124.0	3	3.0	74	11.5	89	7.0	232	2.0	92	3.5	27	3.0	282	330
340	21.5	255	15.0	32	134.0	3	3.5	11	5.5	111	7.0	165	5.0	16	2.0	18	13.0	282	34

TABLE 4 (cont.). Additions to the Arguments for the days of the year.

Arg.	41		42		43		44		45		46		47		30 48		49 50		Arg.
d	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
10	10.0	0	10.0	0	0.5	148	2.5	150	0.0	125	3.0	21	10.0	0	10.0	0	10.0	0	10
20	20.0	0	20.0	0	1.5	107	5.5	121	0.5	117	6.0	42	20.0	0	20.0	0	6.37	50	20
30	30.0	0	3.0	37	2.5	66	1.5	63	1.0	109	2.5	16	30.0	0	2.45	4	2.73	100	30
40	40.0	0	13.0	37	3.5	25	4.5	34	1.5	101	5.5	37	40.0	0	12.45	4	12.73	100	40
50	50.0	0	23.0	37	4.0	173	0.0	155	2.0	93	2.0	11	50.0	0	22.45	4	9.10	49	50
60	60.0	0	6.0	74	5.0	132	3.0	126	2.5	85	5.0	32	60.0	0	4.89	8	5.47	99	60
70	70.0	0	16.0	74	6.0	91	6.0	97	3.0	77	1.5	6	70.0	0	14.89	8	1.83	48	70
80	80.0	0	26.0	74	7.0	50	2.0	39	3.5	69	4.5	27	80.0	0	24.89	8	11.83	48	80
90	90.0	0	9.0	111	8.0	9	5.0	10	4.0	61	1.0	1	90.0	0	7.34	12	8.20	98	90
100	100.0	0	19.0	111	8.5	157	0.5	131	4.5	53	4.0	22	100.0	0	17.34	12	4.56	47	100
110	110.0	0	2.0	148	0.5	75	3.5	102	5.0	45	0.0	64	110.0	0	27.34	12	0.93	97	110
120	120.0	0	12.0	148	1.5	34	0.5	73	5.5	37	3.5	17	120.0	0	9.79	16	10.93	97	120
130	130.0	0	22.0	148	2.0	182	2.5	15	6.0	29	0.5	38	130.0	0	19.79	16	7.30	46	130
140	140.0	0	5.5	33	3.0	141	5.0	105	6.5	21	3.0	12	140.0	0	2.23	20	3.66	96	140
150	150.0	0	15.5	33	4.0	100	1.0	107	7.0	13	6.0	33	150.0	0	12.23	20	0.03	45	150
160	160.0	0	25.5	33	5.0	59	4.0	78	7.5	5	2.5	7	160.0	0	22.23	20	10.03	45	160
170	170.0	0	8.5	70	6.0	18	0.0	20	7.5	130	5.5	28	170.0	0	4.68	24	6.40	95	170
180	6.5	8	18.5	70	6.5	166	2.5	170	8.0	122	2.0	2	180.0	0	18.00	24	2.76	44	180
190	16.5	8	1.5	107	7.5	125	5.5	141	8.5	114	5.0	23	190.0	0	24.68	24	12.76	44	190
200	26.5	8	11.5	107	8.5	84	1.5	83	0.0	106	1.0	65	200.0	0	7.13	28	9.13	94	200
210	36.5	8	21.5	107	0.5	2	4.5	54	0.0	90	4.5	18	210.0	0	17.13	28	5.50	43	210
220	46.5	8	4.5	144	1.0	150	0.0	175	0.5	82	0.5	60	220.0	0	27.13	28	1.86	93	220
230	56.5	8	14.5	144	2.0	109	3.0	146	1.0	74	4.0	13	230.0	0	9.57	32	11.86	93	230
240	66.5	8	24.5	144	3.0	68	6.0	117	1.5	66	0.0	55	240.0	0	19.57	32	8.23	42	240
250	76.5	8	8.0	29	4.0	27	2.0	59	2.0	58	3.5	8	250.0	0	2.02	36	4.59	92	250
260	86.5	8	18.0	29	4.5	175	5.0	30	2.5	50	6.5	29	260.0	0	12.02	36	0.96	41	260
270	96.5	8	1.0	66	5.5	134	0.5	151	3.0	42	3.0	3	270.0	0	22.02	36	10.96	41	270
280	106.5	8	11.0	66	6.5	93	3.5	122	3.5	34	6.0	24	280.0	0	4.47	40	7.33	91	280
290	116.5	8	21.0	66	7.5	52	6.5	93	4.0	26	2.0	66	290.0	0	14.47	40	3.69	40	290
300	126.5	8	4.0	103	8.5	11	2.5	35	4.5	18	5.5	19	300.0	0	24.47	40	0.06	90	300
310	136.5	8	14.0	103	0.0	118	5.5	6	5.0	10	1.5	61	310.0	0	6.91	44	10.06	90	310
320	146.5	8	24.0	103	1.0	77	1.0	127	5.5	2	5.0	14	320.0	0	16.91	44	6.43	30	320
330	156.5	8	7.0	140	2.0	36	4.0	98	5.5	127	1.0	56	330.0	0	26.91	44	2.79	89	330
340	166.5	8	17.0	140	2.5	184	0.0	40	6.0	119	4.5	9	340.0	0	9.36	48	12.79	89	340
350	3.0	16	0.5	25	3.5	143	3.0	11	6.5	111	0.5	51	350.0	0	19.36	48	9.16	38	350
360	13.0	16	10.5	25	4.5	102	5.5	161	7.0	103	4.0	4	360.0	0	1.80	52	5.53	88	360

Arg.	51		52		53		54		55		56		57		58		59		Arg.
d	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
10	10.0	0	10.0	0	10.0	0	10.0	0	10.0	0	10.0	0	10.0	0	10.0	0	10.0	0	10
20	7.0	9	20.0	0	20.0	0	20.0	0	20.0	0	9.5	59	3.5	107	20.0	0	20.0	0	20
30	4.0	18	7.5	1	30.0	0	0.0	32	30.0	0	9.5	38	13.5	107	30.0	0	30.0	0	30
40	1.5	8	17.5	1	4.5	7	10.0	32	7.5	57	9.5	17	7.5	102	40.0	0	40.0	0	40
50	11.5	8	5.0	2	14.5	7	20.0	32	17.5	57	9.0	76	1.5	97	50.0	0	50.0	0	50
60	8.5	17	15.0	2	24.5	7	0.5	17	27.5	57	9.0	55	11.5	97	60.0	0	60.0	0	60
70	6.0	7	3.0	0	34.5	7	10.5	17	5.0	114	9.0	34	5.5	92	70.0	0	70.0	0	70
80	3.0	16	13.0	0	9.0	14	20.5	17	15.0	114	9.0	13	15.5	92	80.0	0	80.0	0	80
90	0.5	6	0.5	1	19.0	14	1.0	2	25.0	114	8.5	72	9.5	87	90.0	0	90.0	0	90
100	10.5	6	10.5	1	29.0	14	11.0	2	3.0	41	8.5	51	3.5	82	100.0	0	100.0	0	100
110	7.5	15	20.5	1	3.5	21	21.0	2	13.0	41	8.5	30	13.5	82	110.0	0	110.0	0	110
120	5.0	5	8.0	2	13.5	21	1.0	34	23.0	41	8.5	9	7.5	77	120.0	0	120.0	0	120
130	2.0	14	18.0	2	23.5	21	11.0	34	0.5	98	8.0	68	1.5	72	130.0	0	130.0	0	130
140	12.0	14	6.0	0	33.5	21	21.0	34	10.5	98	8.0	47	11.5	72	140.0	0	140.0	0	140
150	9.5	4	16.0	0	8.0	28	1.5	19	20.5	98	8.0	26	5.5	67	150.0	0	150.0	0	150
160	6.5	13	3.5	1	18.0	28	11.5	19	30.5	98	8.0	5	15.5	67	160.0	0	160.0	0	160
170	4.0	3	13.5	1	28.0	28	21.5	19	8.5	25	7.5	64	9.5	62	170.0	0	170.0	0	170
180	1.0	12	1.0	2	2.5	35	2.0	4	18.5	25	7.5	43	3.5	57	180.0	0	180.0	0	180
190	11.0	12	11.0	2	12.5	35	12.0	4	28.5	25	7.5	22	13.5	57	190.0	0	1.5	3	190
200	8.5	2	21.0	2	22.5	35	22.0	4	6.0	82	7.5	1	7.5	52	200.0	0	11.5	3	200
210	5.5	11	9.0	0	32.5	35	2.0	36	16.0	82	7.0	60	1.5	47	210.0	0	21.5	3	210
220	3.0	1	19.0	0	7.5	3	12.0	36	26.0	82	7.0	39	11.5	47	220.0	0	31.5	3	220
230	0.0	10	6.5	1	17.5	3	22.0	36	4.0	9	7.0	18	5.5	42	230.0	0	41.5	3	230
240	10.0	10	16.5	1	27.5	3	2.5	21	14.0	9	6.5	77	15.5	42	240.0	0	51.5	3	240
250	7.5	0	4.0	2	2.0	10	12.5	21	24.0	9	6.5	56	9.5	37	250.0	0	61.5	3	250
260	4.5	9	2.0	2	12.0	10	22.5	21	1.5	66	6.5	35	3.5	32	260.0	0	71.5	3	260
270	1.5	18	14.0	0	22.0	10	3.0	6	11.5	66	6.5	14	13.5	32	270.0	0	81.5	3	270
280	11.5	18	12.0	0	32.0	10	13.0	6	21.5	66	6.0	73	7.5	27	280.0	0	91.5	3	280
290	9.0	8	22.0	0	6.5	17	23.0	6	31.5	66	6.0	52	1.5	22	290.0	0	101.5	3	290
300	6.0	17	9.5	1	16.5	17	3.0	38	9.0	123	6.0	31	11.5	22	300.0	0	111.5	3	300
310	3.5	7	19.5	1	26.5	17	13.0	38	19.0	123	6.0	10	5.5	17	310.0	0	121.5	3	310
320	0.5	16	7.0	2	1.0	24	23.0	38	29.0	123	5.5	69	15.5	17	320.0	0	131.5	3	320
330	10.5	16	17.0	2	11.0	24	3.5	23	7.0	50	5.5	48	9.5	12	330.0	0	141.5	3	330
340	8.0	6	5.0	0	21.0	24	13.5	23	17.0	50	5.5	27	3.5	7	340.0	0	151.5	3	340
350	5.0	15	15.0	0	31.0	24	23.5	23	27.0	50	5.5	6	13.5	7	350.0	0	161.5	3	350
360	2.5	5	2.5																

TABLE 4 (concl.). Additions to the Arguments for the days of the year.

Arg.	60		61		62		63		64		65		66		67		68		69		70		71		Arg.
d	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d	c	d
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0
10	10.0	0	10.0	0	0.0	141	10.0	0	10.0	0	10.0	0	10.0	0	10.0	0	10.0	0	10.0	0	10.0	0	10.0	0	10
20	5.0	46	20.0	0	0.5	77	20.0	0	20.0	0	20.0	0	20.0	0	20.0	0	20.0	0	20.0	0	20.0	0	20.0	0	20
30	0.0	92	2.0	10	1.0	13	30.0	0	3.9	2	2.4	2	2.4	2	2.3	2	2.3	2	2.3	2	2.3	2	2.0	196	30
40	10.0	92	12.0	10	1.0	154	7.87	6	13.9	2	12.4	2	12.4	2	12.3	2	12.3	2	12.3	2	12.3	2	12.0	196	40
50	5.0	138	22.0	10	1.5	90	17.87	6	23.9	2	22.4	2	22.4	2	22.3	2	22.3	2	22.3	2	22.3	2	22.0	196	50
60	0.5	13	4.0	20	2.0	26	27.87	6	7.8	4	4.9	4	4.9	4	4.6	4	4.6	4	4.6	4	4.6	4	4.5	172	60
70	10.5	13	14.0	20	2.0	167	5.74	12	17.8	4	14.9	4	14.9	4	14.6	4	14.6	4	14.6	4	14.6	4	14.5	172	70
80	5.5	59	24.0	20	2.5	103	15.74	12	1.7	6	24.9	4	24.9	4	24.6	4	24.6	4	24.6	4	24.6	4	24.5	172	80
90	0.5	105	6.0	30	3.0	39	25.74	12	11.7	6	7.3	6	7.3	6	6.9	6	6.9	6	6.9	6	6.9	6	7.0	148	90
100	10.5	105	16.0	30	3.0	180	3.62	18	21.7	6	17.3	6	17.3	6	16.9	6	16.9	6	16.9	6	16.9	6	17.0	148	100
110	5.5	151	26.0	30	3.5	116	13.62	18	5.6	8	27.3	6	27.3	6	26.9	6	26.9	6	26.9	6	26.9	6	27.0	148	110
120	1.0	26	8.0	40	4.0	52	23.62	18	15.6	8	9.8	8	9.8	8	9.2	8	9.2	8	9.2	8	9.2	8	9.5	124	120
130	11.0	26	18.0	40	4.0	193	1.49	24	25.6	8	19.8	8	19.8	8	19.2	8	19.2	8	19.2	8	19.2	8	19.5	124	130
140	6.0	72	0.0	50	4.5	129	11.49	24	9.5	10	2.2	10	2.2	10	1.5	10	1.5	10	1.5	10	1.5	10	2.0	100	140
150	1.0	118	10.0	50	5.0	65	21.49	24	19.5	10	12.2	10	12.2	10	11.5	10	11.5	10	11.5	10	11.5	10	12.0	100	150
160	11.0	118	20.0	50	5.5	1	31.49	24	3.4	12	22.2	10	22.2	10	21.5	10	21.5	10	21.5	10	21.5	10	22.0	100	160
170	6.0	164	2.5	7	5.5	142	9.36	30	13.4	12	4.6	12	4.6	12	3.9	12	3.9	12	3.9	12	3.9	12	4.5	76	170
180	1.5	39	12.5	7	6.0	78	10.36	30	23.4	12	14.6	12	14.6	12	13.9	12	13.9	12	13.9	12	13.9	12	14.5	76	180
190	11.5	39	22.5	7	6.5	14	29.36	30	7.3	14	24.6	12	24.6	12	23.9	12	23.9	12	23.9	12	23.9	12	24.5	76	190
200	6.5	85	4.5	17	6.5	155	7.23	1	17.3	14	7.1	14	7.1	14	6.2	14	6.2	14	6.2	14	6.2	14	7.0	52	200
210	1.5	131	14.5	17	7.0	91	17.23	1	1.2	16	17.1	14	17.1	14	16.2	14	16.2	14	16.2	14	16.2	14	17.0	52	210
220	11.5	131	24.5	17	7.5	27	27.23	1	11.2	16	27.1	14	27.1	14	26.2	14	26.2	14	26.2	14	26.2	14	27.0	52	220
230	7.0	6	6.5	27	7.5	168	5.10	7	21.2	16	9.5	16	9.5	16	8.5	16	8.5	16	8.5	16	8.5	16	9.5	28	230
240	2.0	52	16.5	27	8.0	104	15.10	7	5.1	18	19.5	16	19.5	16	18.5	16	18.5	16	18.5	16	18.5	16	19.5	28	240
250	12.0	52	26.5	27	8.5	40	25.10	7	15.1	18	1.9	18	1.9	18	0.8	18	0.8	18	0.8	18	0.8	18	2.0	4	250
260	7.0	98	8.5	37	8.5	181	2.08	13	25.1	18	11.9	18	11.9	18	10.8	18	10.8	18	10.8	18	10.8	18	12.0	4	260
270	2.0	144	18.5	37	9.0	117	12.98	13	9.0	20	21.9	18	21.9	18	20.8	18	20.8	18	20.8	18	20.8	18	22.0	4	270
280	12.0	144	0.5	47	9.5	53	22.98	13	19.0	20	4.4	20	4.4	20	3.1	20	3.1	20	3.1	20	3.1	20	4.0	200	280
290	7.5	19	10.5	47	0.0	130	0.85	19	2.9	22	14.4	20	14.4	20	13.1	20	13.1	20	13.1	20	13.1	20	14.0	200	290
300	2.5	65	20.5	47	0.5	66	10.85	19	12.0	22	24.4	20	24.4	20	23.1	20	23.1	20	23.1	20	23.1	20	24.0	200	300
310	12.5	65	3.0	4	1.0	2	20.85	19	22.9	22	6.8	22	6.8	22	5.4	22	5.4	22	5.4	22	5.4	22	6.5	176	310
320	7.5	111	13.0	4	1.0	143	30.85	19	6.8	24	16.8	22	16.8	22	15.4	22	15.4	22	15.4	22	15.4	22	16.5	176	320
330	2.5	157	23.0	4	1.5	79	8.72	25	16.8	24	16.8	24	16.8	24	26.8	22	26.8	22	26.8	22	26.8	22	26.5	176	330
340	12.5	157	5.0	14	2.0	15	18.72	25	0.7	26	9.3	24	9.3	24	7.7	24	7.7	24	7.7	24	7.7	24	9.0	152	340
350	8.0	32	15.0	14	2.0	156	28.72	25	10.7	26	19.3	24	19.3	24	17.7	24	17.7	24	17.7	24	17.7	24	19.0	152	350
360	3.0	78	25.0	14	2.5	92	6.59	31	20.7	26	1.7	26	1.7	26	0.0	26	0.0	26	0.0	26	0.0	26	1.5	128	360

Arg.	72		73		74		75		76		77		78		Arg.
d	d	c	d	c	d	c	d	c	d	c	d	c	d	d	
0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	
10	10.0	0	0.0	214	10.0	0	10.0	0	2.5	44	10.0	0	10.0	10	
20	20.0	0	0.5	151	4.5	16	7.0	7	5.5	29	9.5	54	20.0	20	
30	30.0	0	1.0	88	14.5	16	4.0	14	1.0	58	9.5	43	30.0	30	
40	8.0	41	1.5	25	9.0	32	1.5	6	4.0	43	9.5	32	40.0	40	
50	18.0	41	1.5	239	3.5	48	11.5	6	0.0	13	9.5	21	50.0	50	
60	28.0	41	2.0	176	13.5	48	8.5	13	2.5	57	9.5	10	60.0	60	
70	6.0	82	2.5	113	8.0	64	6.0	5	5.5	42	9.0	64	70.0	70	
80	16.0	82	3.0	50	3.0	9	3.0	12	1.5	12	9.0	53	80.0	80	
90	26.0	82	3.0	264	13.0	9	0.5	4	4.0	56	9.0	42	90.0	90	
100	4.5	14	3.5	201	7.5	25	10.5	4	0.0	26	9.0	31	100.0	100	
110	14.5	14	4.0	138	2.0	41	7.5	11	3.0	11	9.0	20	110.0	110	
120	24.5	14	4.5	75	12.0	41	5.0	3	5.5	55	9.0	9	2.5	120	
130	2.5	55	5.0	12	6.5	57	2.0	10	1.5	25	8.5	63	12.5	130	
140	12.5	55	5.0	226	1.5	2	12.0	10	4.5	10	8.5	52	22.5	140	
150	22.5	55	5.5	163	11.5	2	9.5	2	0.0	39	8.5	41	32.5	150	
160	0.5	96	6.0	100	6.0	18	6.5	9	3.0	24	8.5	30	42.5	160	
170	10.5	96	6.5	37	0.5	34	4.0	1	6.0	9	8.5	19	52.5	170	
180	20.5	96	6.5	251	10.5	34	1.0	8	1.5	38	8.5	8	62.5	180	
190	30.5	96	7.0	188	5.0	50	11.0	8	4.5	23	8.0	62	72.5	190	
200	9.0	28	7.5	125	15.0	50	8.5	0	0.0	52	8.0	51	82.5	200	
210	19.0	28	8.0	62	9.5	66	5.5	7	3.0	37	8.0	40	92.5	210	
220	29.0	28	8.0	276	4.5	11	2.5	14	6.0	22	8.0	29	102.5	220	
230	7.0	69	8.5	213	14.5	11	0.0	6	1.5	51	8.0	18	112.5	230	
240	17.0	69	9.0	150	9.0	27	10.0	6	4.5	36	8.0	7	5.0	240	
250	27.0	69	0.0	24	3.5	43	7.0	13	0.5	6	7.5	61	15.0	250	
260	5.5	1	0.0	238	13.5	43	4.5	5	3.0	50	7.5	50	25.0	260	
270	15.5	1	0.5	175	8.0	59	1.5	12	6.0	35	7.5	39	35.0	270	
280	25.5	1	1.0	112	3.0	4	11.5	12	2.0	5	7.5	28	45.0	280	
290	3.5	42	1.5	49	13.0	4	9.0	4	4.5	49	7.5	17	55.0	290	
300	13.5	42	1.5	263	7.5	20	6.0	11	0.5	19	7.5	6	65.0	300	
310	23.5	42	2.0	200	2.0	36	3.5	3	7.0	4	7.0	60	75.0	310	
320	1.5	83	2.5	137	12.0	36	0.5	10	6.0	48	7.0	49	85.0	320	
330	11.5	83	3.0	74	6.5	52	10.5								

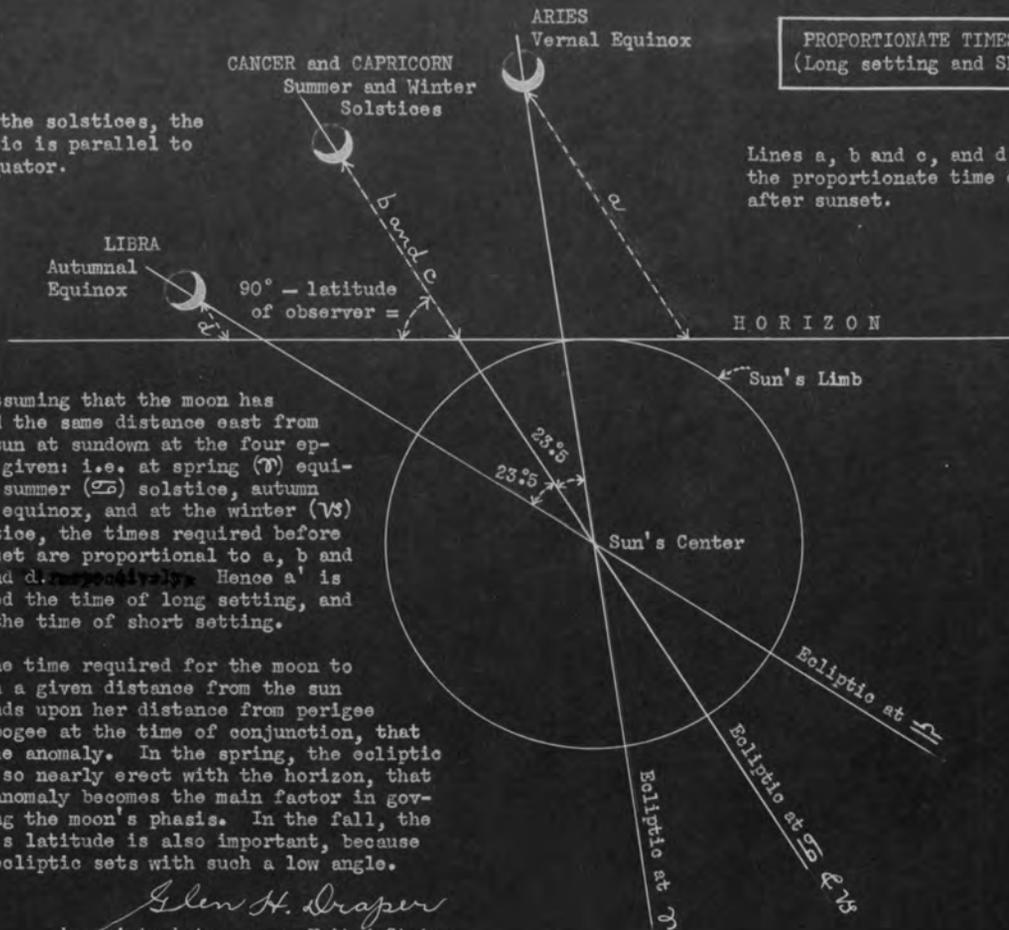
TABLE 5. Conversion of seconds of arc into degrees and minutes.

Deg.	Seconds	Min.	Seconds										
0	00	60	216000	120	432000	180	648000	240	864000	300	1080000	0	00
1	3600	61	219600	121	435600	181	651600	241	867600	301	1083600	1	00
2	7200	62	223200	122	439200	182	655200	242	871200	302	1087200	2	00
3	10800	63	226800	123	442800	183	658800	243	874800	303	1090800	3	00
4	14400	64	230400	124	446400	184	662400	244	878400	304	1094400	4	00
5	18000	65	234000	125	450000	185	666000	245	882000	305	1098000	5	00
6	21600	66	237600	126	453600	186	669600	246	885600	306	1101600	6	00
7	25200	67	241200	127	457200	187	673200	247	889200	307	1105200	7	00
8	28800	68	244800	128	460800	188	676800	248	892800	308	1108800	8	00
9	32400	69	248400	129	464400	189	680400	249	896400	309	1112400	9	00
10	36000	70	252000	130	468000	190	684000	250	900000	310	1116000	10	00
11	39600	71	255600	131	471600	191	687600	251	903600	311	1119600	11	00
12	43200	72	259200	132	475200	192	691200	252	907200	312	1123200	12	00
13	46800	73	262800	133	478800	193	694800	253	910800	313	1126800	13	00
14	50400	74	266400	134	482400	194	698400	254	914400	314	1130400	14	00
15	54000	75	270000	135	486000	195	702000	255	918000	315	1134000	15	00
16	57600	76	273600	136	489600	196	705600	256	921600	316	1137600	16	00
17	61200	77	277200	137	493200	197	709200	257	925200	317	1141200	17	00
18	64800	78	280800	138	496800	198	712800	258	928800	318	1144800	18	00
19	68400	79	284400	139	500400	199	716400	259	932400	319	1148400	19	00
20	72000	80	288000	140	504000	200	720000	260	936000	320	1152000	20	00
21	75600	81	291600	141	507600	201	723600	261	939600	321	1155600	21	00
22	79200	82	295200	142	511200	202	727200	262	943200	322	1159200	22	00
23	82800	83	298800	143	514800	203	730800	263	946800	323	1162800	23	00
24	86400	84	302400	144	518400	204	734400	264	950400	324	1166400	24	00
25	90000	85	306000	145	522000	205	738000	265	954000	325	1170000	25	00
26	93600	86	309600	146	525600	206	741600	266	957600	326	1173600	26	00
27	97200	87	313200	147	529200	207	745200	267	961200	327	1177200	27	00
28	100800	88	316800	148	532800	208	748800	268	964800	328	1180800	28	00
29	104400	89	320400	149	536400	209	752400	269	968400	329	1184400	29	00
30	108000	90	324000	150	540000	210	756000	270	972000	330	1188000	30	00
31	111600	91	327600	151	543600	211	759600	271	975600	331	1191600	31	00
32	115200	92	331200	152	547200	212	763200	272	979200	332	1195200	32	00
33	118800	93	334800	153	550800	213	766800	273	982800	333	1198800	33	00
34	122400	94	338400	154	554400	214	770400	274	986400	334	1202400	34	00
35	126000	95	342000	155	558000	215	774000	275	990000	335	1206000	35	00
36	129600	96	345600	156	561600	216	777600	276	993600	336	1209600	36	00
37	133200	97	349200	157	565200	217	781200	277	997200	337	1213200	37	00
38	136800	98	352800	158	568800	218	784800	278	1000800	338	1216800	38	00
39	140400	99	356400	159	572400	219	788400	279	1004400	339	1220400	39	00
40	144000	100	360000	160	576000	220	792000	280	1008000	340	1224000	40	00
41	147600	101	363600	161	579600	221	795600	281	1011600	341	1227600	41	00
42	151200	102	367200	162	583200	222	799200	282	1015200	342	1231200	42	00
43	154800	103	370800	163	586800	223	802800	283	1018800	343	1234800	43	00
44	158400	104	374400	164	590400	224	806400	284	1022400	344	1238400	44	00
45	162000	105	378000	165	594000	225	810000	285	1026000	345	1242000	45	00
46	165600	106	381600	166	597600	226	813600	286	1029600	346	1245600	46	00
47	169200	107	385200	167	601200	227	817200	287	1033200	347	1249200	47	00
48	172800	108	388800	168	604800	228	820800	288	1036800	348	1252800	48	00
49	176400	109	392400	169	608400	229	824400	289	1040400	349	1256400	49	00
50	180000	110	396000	170	612000	230	828000	290	1044000	350	1260000	50	00
51	183600	111	399600	171	615600	231	831600	291	1047600	351	1263600	51	00
52	187200	112	403200	172	619200	232	835200	292	1051200	352	1267200	52	00
53	190800	113	406800	173	622800	233	838800	293	1054800	353	1270800	53	00
54	194400	114	410400	174	626400	234	842400	294	1058400	354	1274400	54	00
55	198000	115	414000	175	630000	235	846000	295	1062000	355	1278000	55	00
56	201600	116	417600	176	633600	236	849600	296	1065600	356	1281600	56	00
57	205200	117	421200	177	637200	237	853200	297	1069200	357	1285200	57	00
58	208800	118	424800	178	640800	238	856800	298	1072800	358	1288800	58	00
59	212400	119	428400	179	644400	239	860400	299	1076400	359	1292400	59	00
60	216000	120	432000	180	648000	240	864000	300	1080000	360	1296000	60	00

(T)

PROPORTIONATE TIMES OF MOONSET
(Long setting and Short setting)

At the solstices, the ecliptic is parallel to the equator.



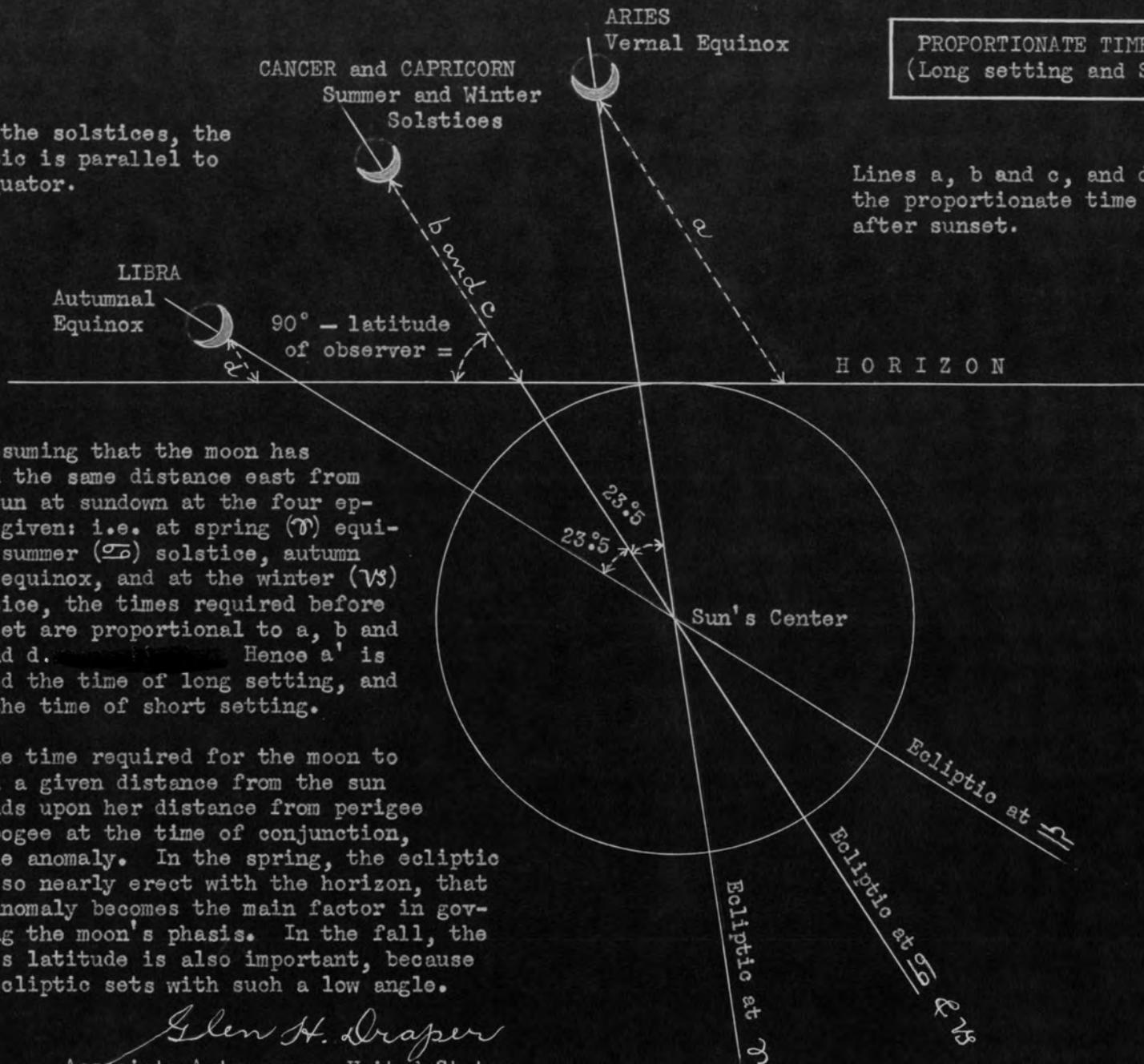
I Assuming that the moon has moved the same distance east from the sun at sundown at the four epochs given: i.e. at spring (♈) equinox, summer (♊) solstice, autumn (♏) equinox, and at the winter (♋) solstice, the times required before moonset are proportional to a, b and c, and d respectively. Hence a' is called the time of long setting, and d', the time of short setting.

II The time required for the moon to reach a given distance from the sun depends upon her distance from perigee or apogee at the time of conjunction, that is, the anomaly. In the spring, the ecliptic sets so nearly erect with the horizon, that the anomaly becomes the main factor in governing the moon's phasis. In the fall, the moon's latitude is also important, because the ecliptic sets with such a low angle.

Glen H. Draper
Associate Astronomer, United States
Naval Observatory

Ⓣ

At the solstices, the ecliptic is parallel to the equator.



PROPORTIONATE TIMES OF MOONSET
(Long setting and Short setting)

Lines a, b and c, and d represent the proportionate time of moonset after sunset.

I Assuming that the moon has moved the same distance east from the sun at sundown at the four epochs given: i.e. at spring (♈) equinox, summer (♊) solstice, autumn (♏) equinox, and at the winter (♋) solstice, the times required before moonset are proportional to a, b and c, and d. Hence a' is called the time of long setting, and d', the time of short setting.

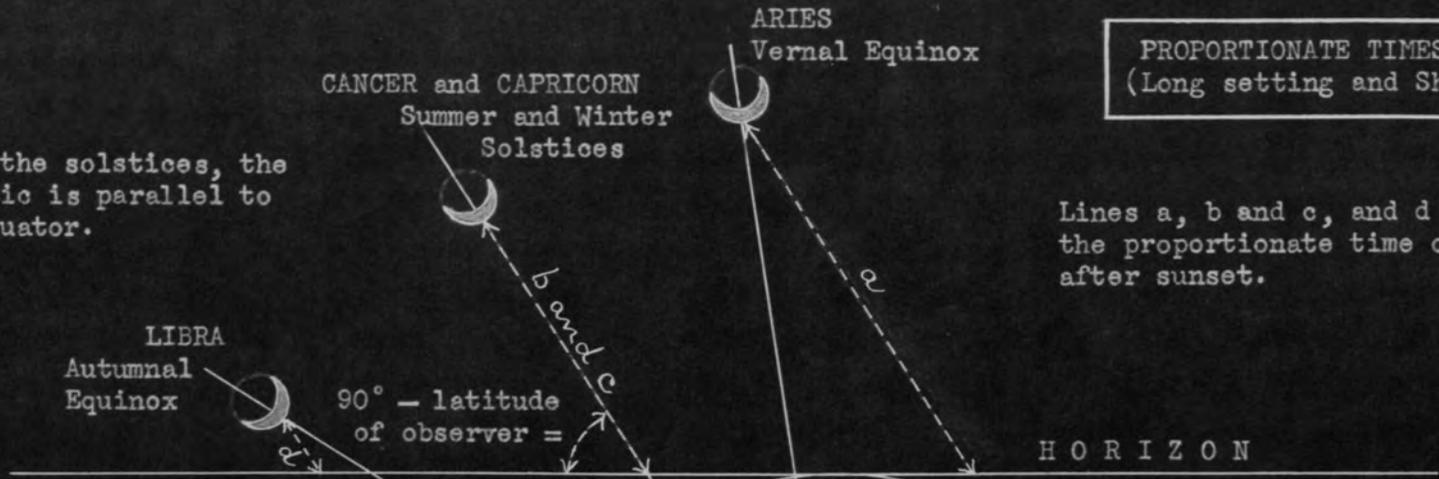
II The time required for the moon to reach a given distance from the sun depends upon her distance from perigee or apogee at the time of conjunction, or the anomaly. In the spring, the ecliptic sets so nearly erect with the horizon, that the anomaly becomes the main factor in governing the moon's phasis. In the fall, the moon's latitude is also important, because the ecliptic sets with such a low angle.

Glen H. Draper
Associate Astronomer, United States
Naval Observatory

T

At the solstices, the ecliptic is parallel to the equator.

PROPORTIONATE TIMES OF MOONSET
(Long setting and Short setting)

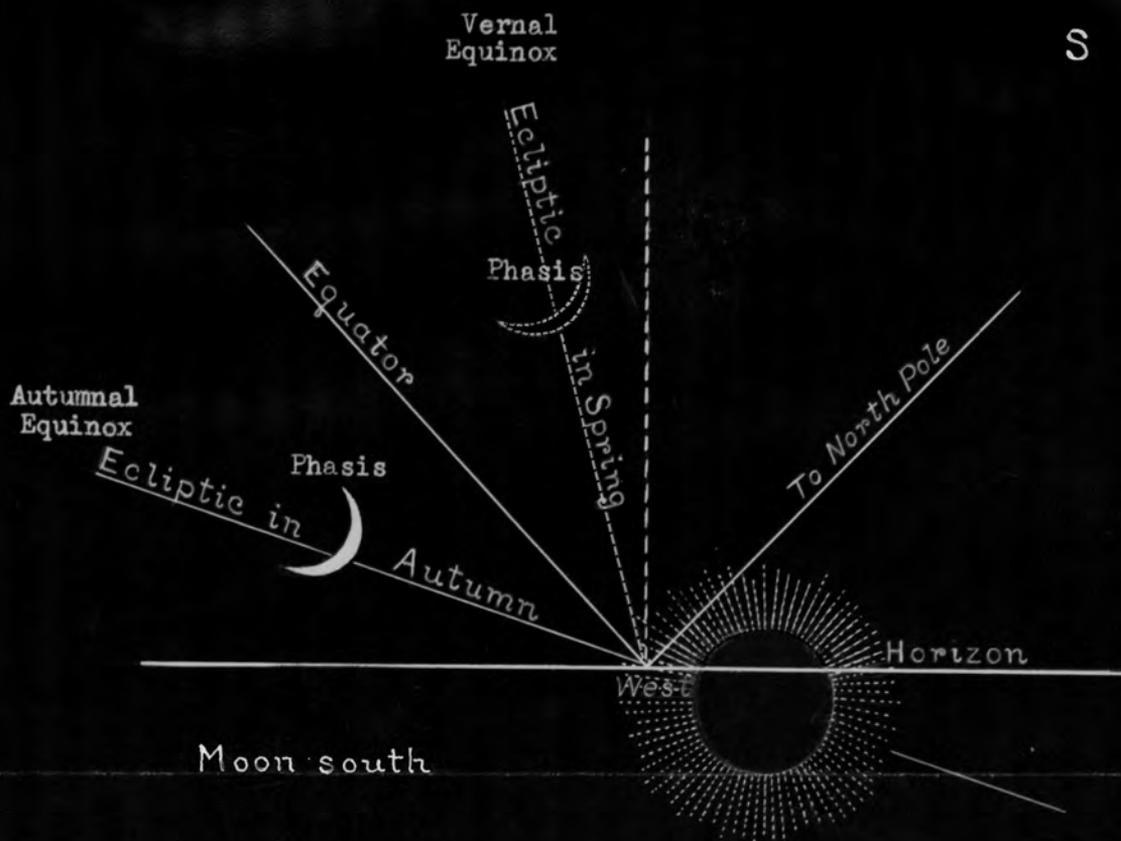


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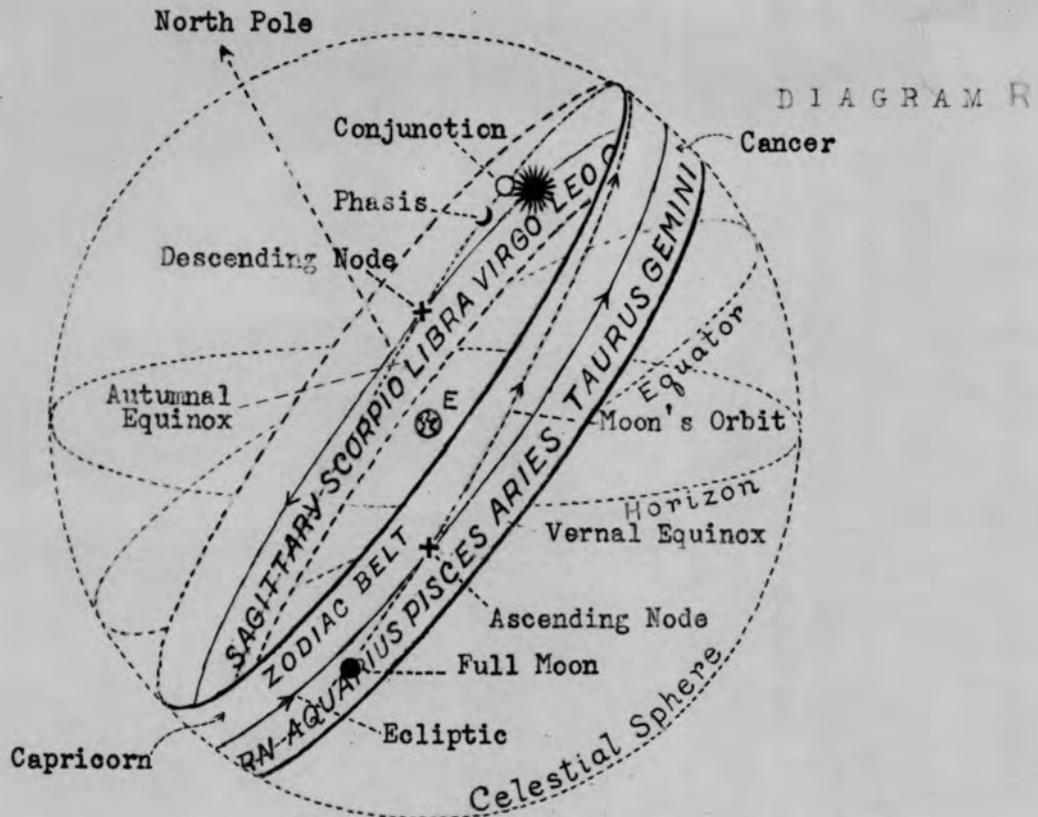
Glen H. Draper
Associate Astronomer, United States
Naval Observatory



POSITION OF THE NEW MOON AT THE EQUINOXES

"The significance of the crescent being shown as lying on its back is seen at once when it is remembered that the new moon is differently inclined to the horizon according to the time of year when it is seen. It is most nearly upright at the time of the autumn equinox; it is most nearly horizontal, "lying on its back," at the spring equinox."--Maunder, Walter E., "Astronomy of the Bible," p. 316.

"If the moon is some distance north of the sun at the time of new moon there will be a tendency towards an early phasis; if it be some distance south of the sun there will be a tendency towards a late phasis. If, again, the moon is near perigee it will move quickly; its right ascension and time of setting will advance rapidly, and there will be a tendency towards an early phasis; if it is near apogee, it will move slowly, and there will be a tendency towards a late phasis."--Fotheringham, J.K., Journal of Philology, Vol. XXIX, 1903, pp. 105, 106.



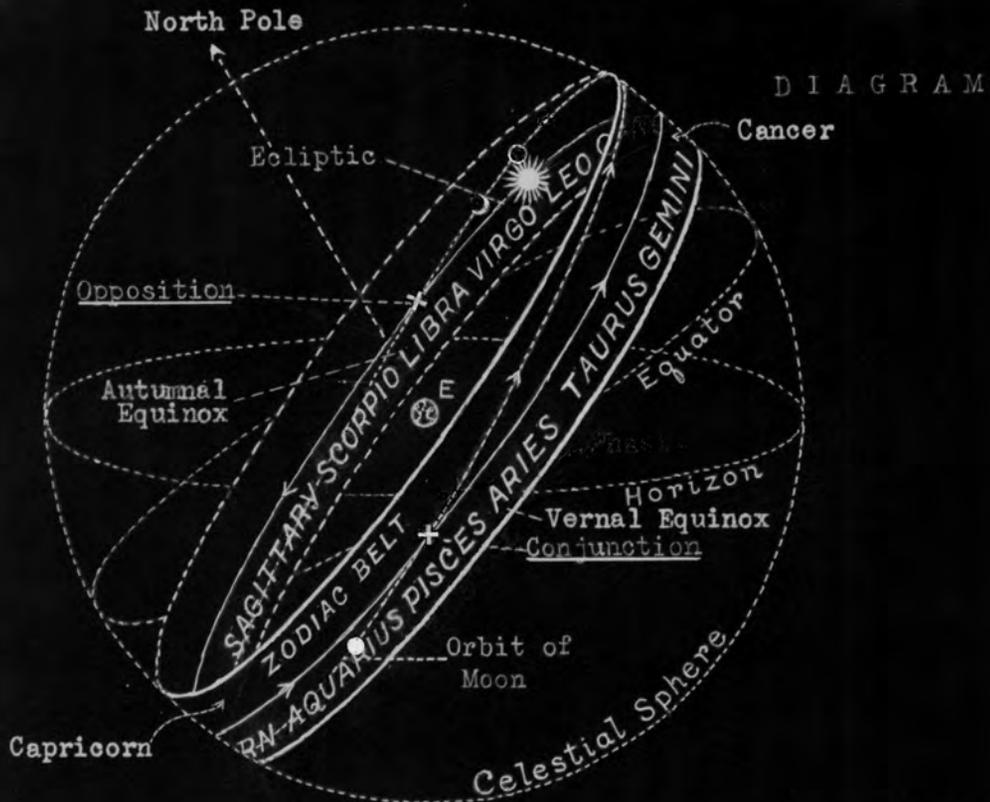
MOON'S APPARENT MONTHLY COURSE IN ZODIAC BELT

Through the center of the Zodiac Belt runs the ecliptic, or sun's apparent path in the sky, as seen from the earth. The moon's apparent path is also projected by the eye upon the zodiac, around which she appears to travel every month. Though millions of miles apart, the paths of both sun and moon seem to be traced upon the same celestial surface. In one month's time the sun advances one sign only, while the moon travels through nearly the whole zodiac. The moon's orbit is inclined to the ecliptic by an angle of about five degrees. When nearest the earth, the moon's position is called perigee; when farthest from the earth, it is called apogee.

The moon passes through the zodiac with an irregular velocity. Her course runs alternately about two weeks north of the sun, and two weeks south of the sun. Her smallest daily movement amounts to $11^{\circ} 6^m 35^s$, and her largest, $15^{\circ} 14^m 35^s$.* The sun requires six months to go from Aries to Libra, or from the vernal equinox to the autumnal; the moon apparently travels this distance in about two weeks; while the earth, in her daily revolution, turns from Aries to Libra in 12 hours. The time from conjunction to phasis is called the "translation period," and this varies from one to four days according to the place of the moon.

The accompanying diagram represents the apparent course only of the sun and moon. The center of the solar system is, of course, the sun, around which the earth and her lunar satellite revolve.

* Geminus, "Elementa Astronomiae," Uralogion, p. 211.

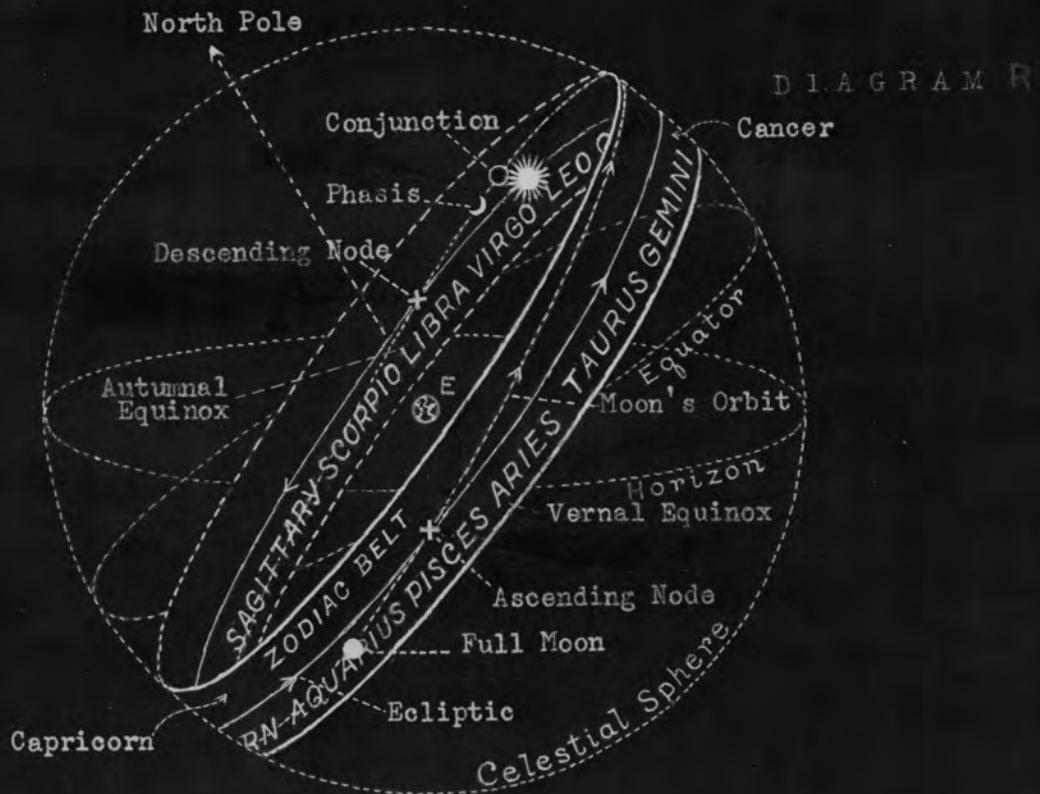


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The moon passes through the zodiac with an irregular velocity, accompanying a movement north and south of the sun every lunation. Her smallest daily movement amounts to $11^{\circ} 6^m 35^s$, and her largest, $15^{\circ} 14^m 35^s$.² The sun requires six months to go from Aries to Libra, or from the vernal equinox to the autumnal. The moon apparently travels this distance in about two weeks; in her daily revolution, the earth turns from Aries to Libra in 12 hours. The time from conjunction to phasis is called the "translation period," and this varies from one to four days, according to the place of the moon.

¹ "Young's Astronomy," p. 155.
² Geminus, "Elementa Astronomiae," Uralogion, p. 211.



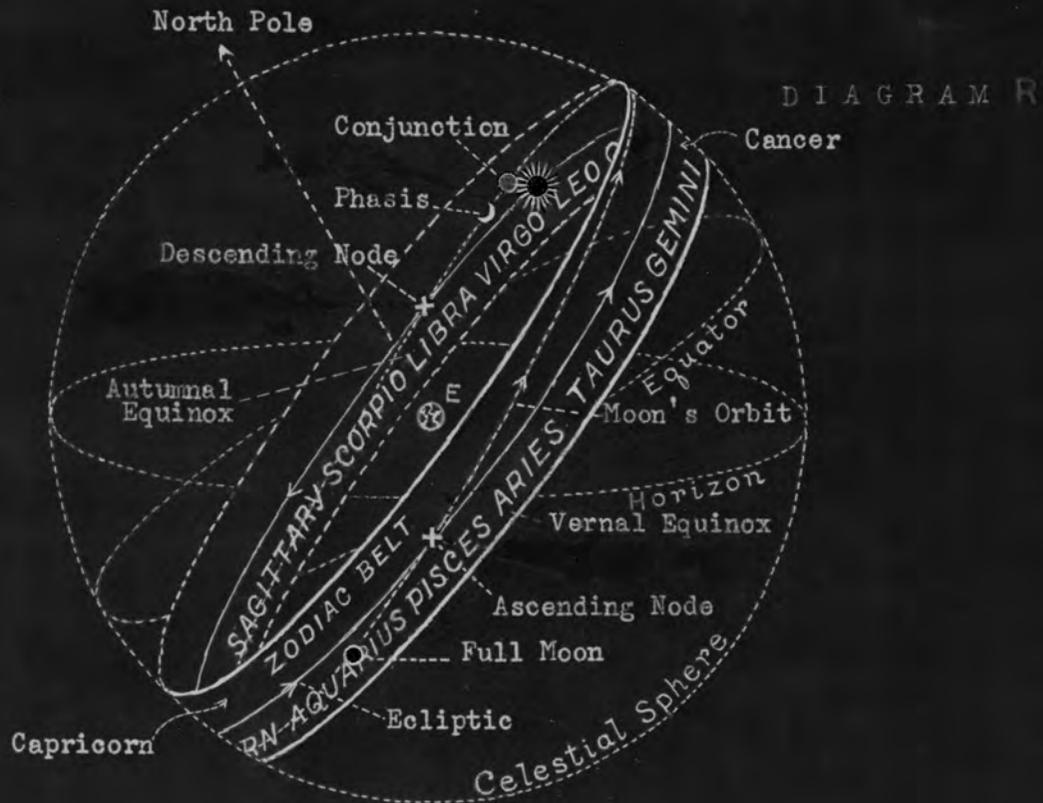
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Sept. 22, 1940

55 433 431 429 427 425 423 421 419 417 415 413 411 409 407 405 403 401 399

** Regular intercalation -- same as crucifixion year



ARTAXERXES II

Darius II

Day	Value	Day	Value
23	354	1	354
25	384	3	354
27	354	5	354
29	384	7	354
31	354	9	354
33	384	11	354
35	354	13	354
37	384	15	354
39	354	17	354
41	384	19	354
43	354	21	354
45	384	23	354
47	354	25	354
49	384	27	354
51	354	29	354
53	384	31	354
55	354	33	354
57	384	35	354
59	354	37	354
61	384	39	354
63	354	41	354
65	384	43	354
67	354	45	354
69	384	47	354
71	354	49	354
73	384	51	354
75	354	53	354
77	384	55	354
79	354	57	354
81	384	59	354
83	354	61	354
85	384	63	354
87	354	65	354
89	384	67	354
91	354	69	354
93	384	71	354
95	354	73	354
97	384	75	354
99	354	77	354
101	384	79	354
103	354	81	354
105	384	83	354
107	354	85	354
109	384	87	354
111	354	89	354
113	384	91	354
115	354	93	354
117	384	95	354
119	354	97	354
121	384	99	354
123	354	101	354
125	384	103	354
127	354	105	354
129	384	107	354
131	354	109	354
133	384	111	354
135	354	113	354
137	384	115	354
139	354	117	354
141	384	119	354
143	354	121	354
145	384	123	354
147	354	125	354
149	384	127	354
151	354	129	354
153	384	131	354
155	354	133	354
157	384	135	354
159	354	137	354
161	384	139	354
163	354	141	354
165	384	143	354
167	354	145	354
169	384	147	354
171	354	149	354
173	384	151	354
175	354	153	354
177	384	155	354
179	354	157	354
181	384	159	354
183	354	161	354
185	384	163	354
187	354	165	354
189	384	167	354
191	354	169	354
193	384	171	354
195	354	173	354
197	384	175	354
199	354	177	354
201	384	179	354
203	354	181	354
205	384	183	354
207	354	185	354
209	384	187	354
211	354	189	354
213	384	191	354
215	354	193	354
217	384	195	354
219	354	197	354
221	384	199	354
223	354	201	354
225	384	203	354
227	354	205	354
229	384	207	354
231	354	209	354
233	384	211	354
235	354	213	354
237	384	215	354
239	354	217	354
241	384	219	354
243	354	221	354
245	384	223	354
247	354	225	354
249	384	227	354
251	354	229	354
253	384	231	354
255	354	233	354
257	384	235	354
259	354	237	354
261	384	239	354
263	354	241	354
265	384	243	354
267	354	245	354
269	384	247	354
271	354	249	354
273	384	251	354
275	354	253	354
277	384	255	354
279	354	257	354
281	384	259	354
283	354	261	354
285	384	263	354
287	354	265	354
289	384	267	354
291	354	269	354
293	384	271	354
295	354	273	354
297	384	275	354
299	354	277	354
301	384	279	354
303	354	281	354
305	384	283	354
307	354	285	354
309	384	287	354
311	354	289	354
313	384	291	354
315	354	293	354
317	384	295	354
319	354	297	354
321	384	299	354
323	354	301	354
325	384	303	354
327	354	305	354
329	384	307	354
331	354	309	354
333	384	311	354
335	354	313	354
337	384	315	354
339	354	317	354
341	384	319	354
343	354	321	354
345	384	323	354
347	354	325	354
349	384	327	354
351	354	329	354
353	384	331	354
355	354	333	354
357	384	335	354
359	354	337	354
361	384	339	354
363	354	341	354
365	384	343	354
367	354	345	354
369	384	347	354
371	354	349	354
373	384	351	354
375	354	353	354
377	384	355	354
379	354	357	354
381	384	359	354
383	354	361	354
385	384	363	354
387	354	365	354
389	384	367	354
391	354	369	354
393	384	371	354
395	354	373	354
397	384	375	354
399	354	377	354

Nov. 5, 1940
 Dec. 31, 1940
 Jan. 16, 1941
 G.A.

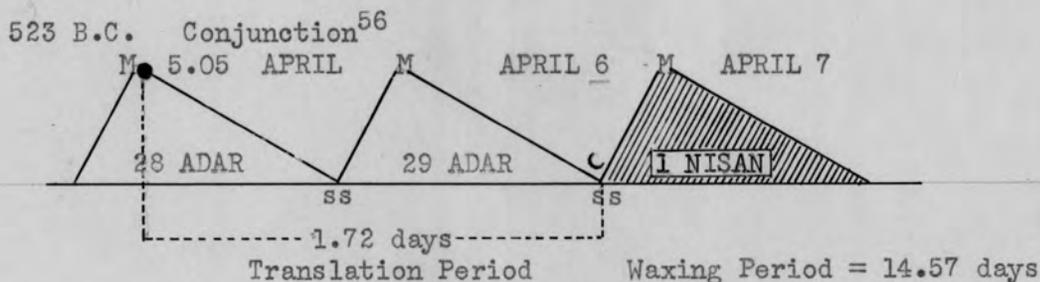
Egyptian campaign Daniel a captive		Carchemish (Jer.46) Drought (Jer.14)		Daniel before king End of 3rd year Daniel 2	
Death of Nabo. 4th month		Rain fast 9th month			
606	605	604	603	602	
20	Nis 21	Nis	1	2	Nis Nebuchadnezzar
2	3	4	5	6	Jehoiakim
Tis	Tis	Tis	Tis	Tis	Tis
"Wine cup" (Jer.25) Rechabites (Jer.35) "Pots of wine" Prophet at large		Roll written (Jer.36) Baruch (Jer.45) Prophet <u>shut up</u>			

	I Siege (9-10-10) Ezek.24:1			II Messenger (12-10-5) Ezek.33:21		
Julian	589	588	587	586	585	
1 Nebuchadnezzar	16	17	18	19	20	
2 Fall New Year (west)	Tis + 9	Tis 10	Tis 11	12	Tis + (12)	
3 Spring New Year (east)	9 +	10	11	12 +	13	
	Nis	Nis	Nis	Nis	Nis	

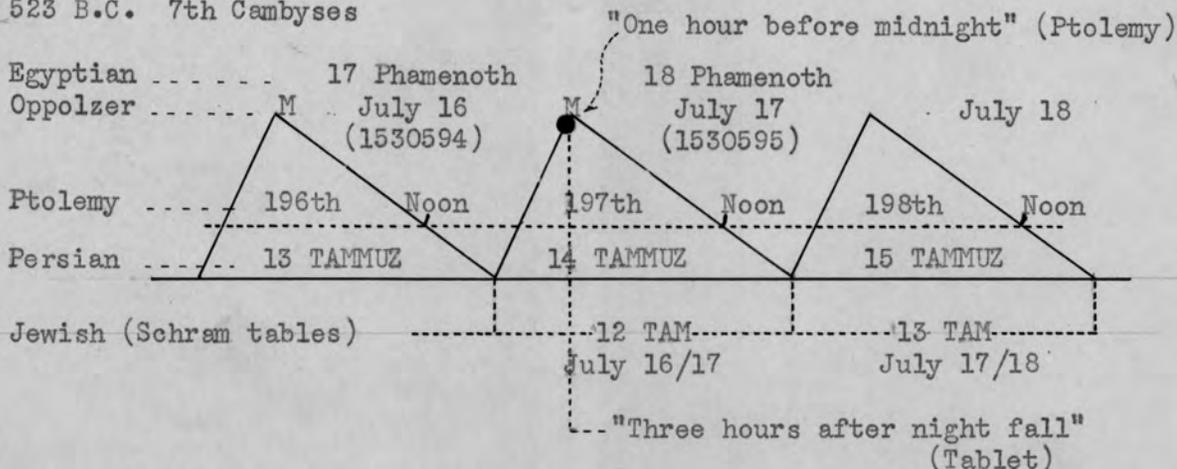
From Nisan to Tishri, an east calendar would have its year one in advance of the west; from Tishri to Nisan, both calendars would have the same year.

Jerusalem burned (11-5-10) Jer.52:12

Translation of Persian New Moon



523 B.C. 7th Cambyses



Release of Jehoiachin

1 January

<u>Julian Year</u>	564	563	562	561	560	559	558	
<u>Ptolemy</u>	41	42	43	1	2	1	2	
<u>Nebuch. Jehoiachin</u>	40 33 Tis	41 34	42 35	43 36	1 x	37	2	1 Tis 2
<u>Ezekiel Year</u>	33	34	35	36	37			
	Nis				Nis	Nis		
				27 Adar		S V		Accession year

Jer 52:31
2 Kings 25:27

SYNCHRONISM I

26 Jan. = Apr. 22
1 Jan. 1 Thoth

21 Jan.

	625	624	623	622	621	620	619	618	617	616	615	614	613	612	611	610	609	608	607	606	605	604	603	(Julian)	
	1	2	3	4	5	6	7	8	9	10	11	12	Nabopolassar				17	18	19	20	21	1	2	Neb. (Ptolemy)	
Nabo.	22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Neb. (Jewish)
Josiah	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	Jehoi. (Jewish)	
Jeremiah	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Jer. (Jewish)	
	Tis				Tis								Jehoahaz				Tis				Tis				

* Accession year

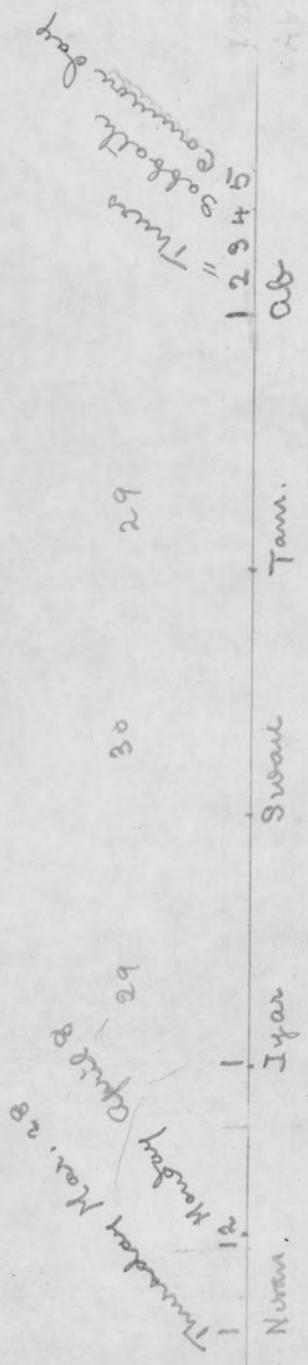
	Ezek 20:1				Ezek 24:1				Tis		Tis		
	Ezek 8:1												
Julian year	592	591	590	589	588	587	586	585	584				
Jeremiah year	4	5	6	Zedekiah				9	10	11	12	Messenger arrives on 5 Tebet	
Ezekiel year	5	6	Jehoiachin				9	10	11	12	Fall of City on 10 Ab		
	Nis		Nis						Nis		Nis		
	Call of Ezekiel 592 B.C.												
	----- 7 years -----												

Ezek 24:1,2
588-87 B.C.

	Spring		Winter				
	Tisri		Tisri				
Jeremiah year (Jewish)	8th year	Tebet	9th year	10th year			
Ezekiel year (Babylonian)	9th year	Tebet	10th year				
	Nisan		Nisan				
Months between Nisan and Tisri	Iyar (2)	Sivan (3)	Tammuz (4)	Ab (5)	Elul (6)		
	Hesvan (8)		Kislev (9)		Tebet (10)	Shebat (11)	Adar (12)
	Months between Tisri and the subsequent Nisan						

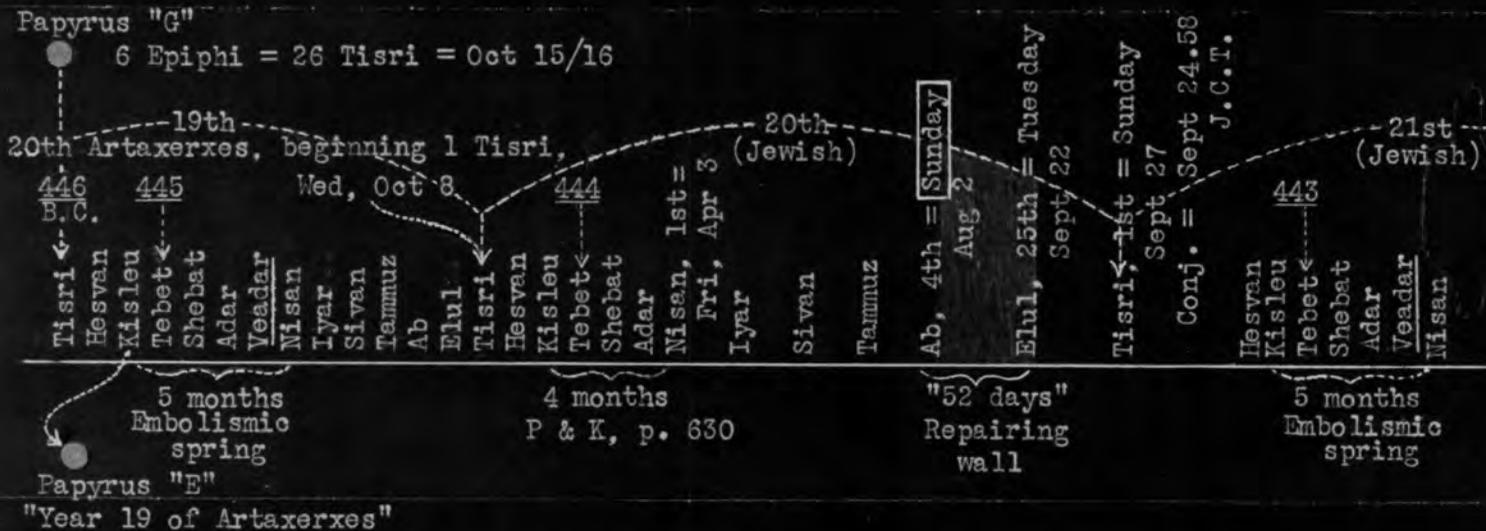
No day could be 31 days long" - Maximum

Ab Sabbath																														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
Blah																														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	
28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52						



If Iyar, Swan, Tam = 87 days, then 5 Ab = Sabbath which is impossible.
 If Iyar, Sw, Tam = 89 days, then 6 cal. months = 178 days, 1 whole day behind moon.

NEHEMIAH DATE FOR REPAIRING WALL
(Neh. 6:15)



"So the wall was finished in the twenty and fifth day of the month Elul, in fifty and two days."-- Nehemiah 6:15.

The passover calculation of Nehemiah's wall date is as follows:

Year = B.C. 444 --
 1 Nisan = Friday, April 3
 4 Ab = Sunday, August 2
 25 Elul = Tuesday, September 22

1. The Year.--Nehemiah himself stresses the fact that it was still the twentieth year of the king when he left Babylon (Neh. 5:14). Papyrus "E," whose Egyptian date synchronizes with an Aramaic date in Kisleu, marks its year as "year 19 of Artaxerxes." The conjunctions governing this synchronism belong to the fall of B.C. 446, which must therefore be the fore part of Artaxerxes' 19th by Jewish reckoning. The year 445 to 444 (from Tisri to Tisri) was accordingly the 20th of this Persian king.

The Spirit of Prophecy also identifies the year 444 in stating that Nehemiah waited "four months" for a favorable opportunity in which to present his case to the king (Prophets and Kings, p. 630). In a common year, like B.C. 444, there were four months only from a day in Kisleu to the same day in Nisan; but, in embolismic years, like 445 and 443, this interval was five months, on account of the intercalary month Veadar. Consequently, it was neither in the year 445, nor in 443, when Nehemiah came to Jerusalem to repair the broken-down wall. It was, therefore, in the summer of B.C. 444, the latter part of the twentieth regnal year of Artaxerxes. This makes the year 457 to be the latter part of the seventh regnal year of the Persian king.

2. The Date.--By passover reckoning, the Nisan new year in the spring of B.C. 444, was Friday, April 3, the conjunction being April 1.33, J.C.T. (Ginzel, "Mathematischen und technischen Chronologie," II Band, p. 552). Therefore, from 25 Elul as Tuesday, September 22, the "52 days" count back to the 4th of Ab, on Sunday, August 2. This was the day in which the people started working on the wall. This date could not have been a day earlier, for Nehemiah would not have brooked a desecration of the Sabbath. Neither could the dating have been delayed a day, by deferring the phasis of Elul, for Ab already had 30 days -- a half day more than the moon's actual lunation in average time. Hence it would be unreasonable to look for a delayed phasis at the end of Ab. Therefore, the foregoing Julian dates must be correct. They are a valid witness to the accuracy of the passover calculation.

SYNCHRONISM I

26 Jan. = Apr. 22
 1 Jan. 1 Thoth

21 Jan.

	625	624	623	622	621	620	619	618	617	616	615	614	613	612	611	610	609	608	607	606	605	604	603	(Julian)	
	1	2	3	4	5	6	7	8	9	10	11	12	Nabopolassar					17	18	19	20	21	1	2	Neb. (Ptolemy)
Nabo.	22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	1	Neb. (Jewish)	
Josiah	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	Jehoi. (Jewish)	
Jeremiah	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Jer. (Jewish)	
	Tis		Tis																		Tis	Tis			

* Accession year

Jehoahaz

SYNCHRONISM I

26 Jan. = Apr. 22
 1 Jan. 1 Thoth



	625	624	623	622	621	620	619	618	617	616	615	614	613	612	611	610	609	608	607	606	605	604	603	(Julian)
	1	2	3	4	5	6	7	8	9	10	11	12	Nabopolassar				17	18	19	20	21	1	2	Neb. (Ptolemy)
Nabo.	22	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	1	Neb. (Jewish)
Josiah	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	1	2	3	4	Jehoi. (Jewish)
Jeremiah	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Jer. (Jewish)
	Tis		Tis																		Tis		Tis	

* Accession year

Temple finished on Sunday, 3rd Adar. Ezra 6:15.

	Iyar	Tammuz	Elul	Hesvan	Tebet	Adar	
Conj. = Apr 16.64,	Nisan	Sivan	Ab	Tisri	Kisleu	Shebat	Veadar
J.C.T.	1- 1	1	1	1	1 ¹⁴	1 ¹¹	1 ¹⁴ 1
1 Nisan = Tuesday, April 20	2	2	2	2	2	2	2 ¹² 2
Tr. Per. = 3.13 days	3	3	3	3	3	3	3 ¹³ 3
Paschal wax. per. = 15.17 days.	4	4	4	4	4	4	4 4
Year length = 354 days.	5	5	5	5	5	5	5 5
	6	6	6	6	6	6	6 6
	7	7	7	7	7	7	7 ¹⁵ 7
	8	8	8	8	8	8	8 ¹⁸ 8
	9	9	9	9	9	9	9 9
	10	10	10	10	10	10	10 ²¹ 10
	11	11	11	11	11	11	11 ²³ 11
Moon fulls May 1.81	12	12	12	12	12	12	12 12
Passover = May 3	13	13	13	13	13	13	13 13
	14	14	14	14	14	14	14 ²² 14
	15	15	15	15	15	15	15 ²⁵ 15
	16	16	16	16	16	16	16 16
	17	17	17	17	17	17	17 ²⁸ 17
	18	18	18	18	18	18	18 18
	19	19	19	19	19	19	19 19
May 1.81 Apr 16.64 15.17 days = Wax. Per.	20	20	20	20	20	20	20 20
	21	21	21	21	21	21	21 ¹ 21
	22	22	22	22	22	22	22 ³ 22
	23	23	23	23	23	23	23 ⁶ 23
	24	24	24	24	24	24	24 ⁹ 24
	25	25	25	25	25	25	25 25
	26	26	26	26	26	26	26 26
	27	27	27	27	27	27	27 ^{8.01} 27
	28	28	28	28	28	28	28 28
	29	29	29	29	29	29	29 ⁸ 29
	30	30	30	30	(30)	(30)	30 (30)

2nd Adar = Jewish Sabbath

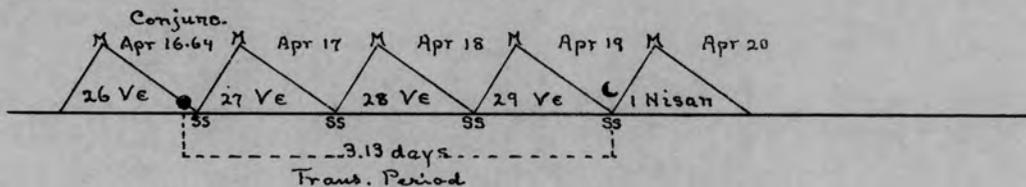
22.19 = F.M.
8.01 = Conj.
14.18

2.74 = Wax. Per.
99
7.42
.59
8.01
8.01

Argument: The Jewish year 516 to 515 B.C. (Apr 20 to Apr 9 for 1 Nisan) = 354 days. Therefore, with the ancient Jewish calendar, an alternate 30 and 29 days throughout the year would be consistent. Hence, since 1 Nisan = Tuesday, according to Table VII, 3 Adar = Sunday, the day upon which the last work was done on the temple.

In this problem, the Nisan conjunction on April 16.64 is a point of departure. If the first day of Nisan should be moved back one day, making the translation period 2.13 days long, instead of 3.13 days, then the passover on 14 Nisan would be moved back to Jewish day of full moon--moon full near midnight of 13 Nisan-- and the 3rd of Adar would be thrust back upon the Jewish Sabbath, thus representing the Jews as finishing their temple on their holy day, contrary to the law. And in addition, if the first of Nisan should be moved back two whole days, cutting down the translation to 1.13 days, then this figure would be altogether at variance with the moon's anomaly and the long waxing period of 15.17 days, which shows the moon going too slow to accomplish a short visibility period.

Consequently, the 3rd Adar is locked in place, as also the translation period of 3.13 days introducing the month Nisan.



March 8.01
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Explanation of Foregoing Table: Nehemiah left Babylon on horse in the spring of Artaxerxes' 20th year (445-444 B.C.), which Nehemiah reckoned from Tishri to Tishri.²⁶ Traveling with only a few officers (Neh.2:9), he would make the journey in much quicker time than Ezra with nearly 1600 people on foot. By the 4th of Ab, which was Sunday in 444 B.C.,²⁷ the wall was begun, and it was finished in 52 days on 25 Elul. For several reasons these Jewish dates are locked in place: (1) the 52-day period cannot begin earlier than 4 Ab on Sunday, both on account of the Jewish Sabbath, and also because, by Jewish reckoning, Ab had 30 days;²⁸ (2) in both 444 and 443, 1 Nisan is fixed by translation periods too short to be lessened by one day on the assumption that the moon might be seen a day earlier, as may occur in Babylonian reckoning; and (3) the building of the wall is tied to the year 444 because the 52-day working period, if dated in 443, would thereby be made to begin on the seventh day of the week, contrary to Jewish law.

The wall was finished within five days of the new year, which Nehemiah evidently called the 21st of the king. Soon after, he decided to assemble nobles, rulers, and people in order to record their genealogies (Neh.7:5). The subsequent Jewish concourse obviously must have been held in the beginning of Artaxerxes' 22nd year, as is described in Nehemiah 8. On this occasion, Ezra reads the law. It was the Jewish new year, and the day was both a "holy convocation," and also the Sabbath day. This synchronism is supported by the Jewish calendar for 443,²⁹ and likewise by the words in verses 9, 10, and 11: (verse 9) "this day is holy unto the Lord your God;" (verse 10) "for this day is holy unto our Lord;" and (verse 11) "for the day is holy." At least the first two of these texts could be applied only to the Sabbath, for a ceremonial sabbath was never called "my holy day;" but was, on the contrary, referred to as "holy unto you" (Lev.23:27). (*Italics mine*)

458-457 =	7
457-456 =	8
456-455 =	9
455-454 =	10
454-453 =	11
453-452 =	12
452-451 =	13
451-450 =	14
450-449 =	15
449-448 =	16
448-447 =	17
447-446 =	18
446-445 =	19
445-444 =	20
444-443 =	21
Tishri to	
Tishri	

We have, therefore, in Nehemiah 8 an important synchronism that ties the Jewish new year on 1 Tishri, 443 B.C., to the seventh day of the week, and which thereby fixes the year 444-443 as the 21st of Artaxerxes according to Nehemiah's Jewish reckoning. By counting back, it is readily demonstrated that Nehemiah must have dated the seventh year of the Persian king in 458-457, computed from Tishri to Tishri. But by this reckoning, his spring month Nisan could occur only in the spring of 457, for the Jewish calendar reckoned the seventh of Artaxerxes as beginning in the fall, six months later than the spring of 458.

The fact has been challenged, however, that Ezra used the same calendar as Nehemiah, and it is claimed that Ezra based his "seventh year" in terms of the Persian calendar.³⁰ He would thus have his pilgrims leaving Babylon in April, 458 B.C.³⁰

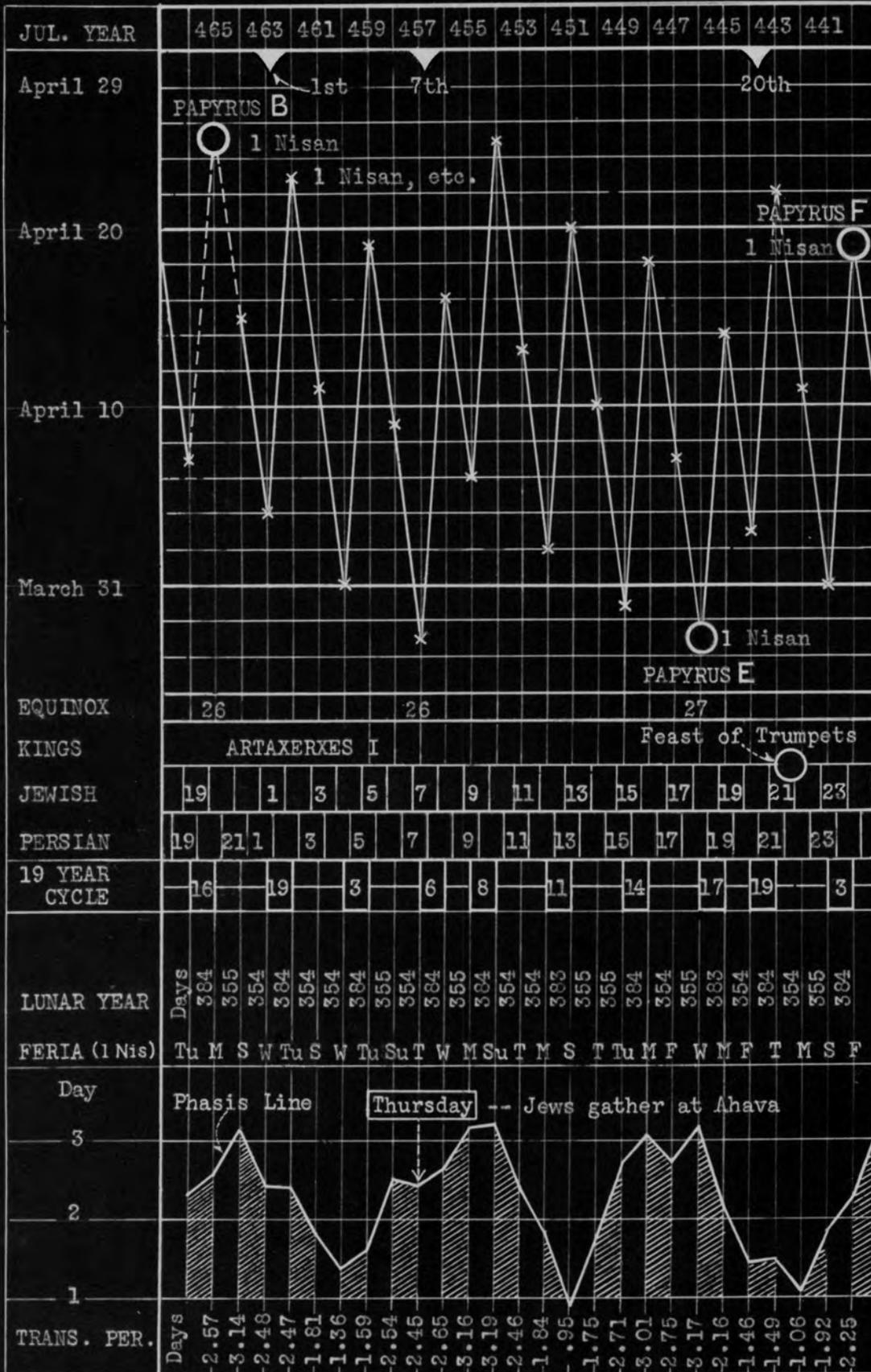
But, if this conclusion were correct, then, in the period between Nisan and Tishri, Ezra's "seventh" according to Persian reckoning, would actually be "sixth" of the Persian king according to Jewish reckoning.³¹ And it would obviously be absurd for chronology to maintain that by an Ezra Jewish calendar, the return was in the sixth year of Artaxerxes, and that by Nehemiah's Jewish calendar, the return was in the seventh of this king! The only consistent conclusion is that both Ezra and Nehemiah employed the same Jewish reckoning, and that the Nisan return from Babylon in the seventh year of Artaxerxes must have occurred in the spring of 457 B.C., and not in 458.

444 B.C. Jan 1 = Th.
Nisan = IV 3
Tr. P. = 1.45

26 Nehemiah has no change of the king's reign in the month Nisan (Neh.2:1).
 27 Cf. Table VII, and pages 10 and 11 of the "Time Argument."
 28 Parker's "Babylonian Chronology" also allows Ab 30 days in 444 B.C. But his
 29 Cf. Table VII. tables give Nisan only 29 days, thus dating 4 Ab on the Jewish Sabbath!
 30 Journal of Near Eastern Studies, Vol. II, April, 1943, p. 129.
 31 In other words, from Nisan to Tishri, the Jews counted the Persian king's year as one less than the Persians, while from Tishri to Nisan, both counts were the same. The Egyptians also used this rule of correspondence. Cf. subsequent table.

SEVENTH OF ARTAXERXES

B.C. From Tisri (458 B.C.) to Tisri (457 B.C.)



W

BABYLONIAN KINGS

(A Study in Old Testament Synchronisms)

Various Reckonings

1 January 1 Thoth =
26 January

April 22

Julian Year	626	625	624	623	622	621	620	619	618	617	616	615	614	613	
Ptolemy		1	2	3	4	5	6	Nabopolassar			10	11	12	13	
Jeremiah Chronicler	22	A	1	2	3	4	5	6	Nabopolassar			9	10	11	12
	13		14	15	16	17	18	Josiah		21	22	23	24	25	

1 Tisri Call of Jeremiah

Julian Year	612	611	610	609	608	607	606	605	604	603	602	601	600	599	
Ptolemy	14	15	16	17	18	19	20	21	1	2	Nebuchadnezzar			6	
Jeremiah Chronicler	13	14	15	16	17	18	19	20	21	A	1	Nebuchadnezzar		4	5
	26	27	28	29	30	31	A	1	2	Jehoiakim		5	6	7	8

23rd of Jeremiah

Julian Year	598	597	596	595	594	593	592	591	590	589	588	587	586	585			
Ptolemy	7	8	9	10	11	12	Nebuchadnezzar			16	17	18	19	20			
Jeremiah Chronicler	6	7	8	9	10	Nebuchadnezzar		14	15	16	17	Tis	18	Tis	19		
Ezekiel	9	10	11	A	1	2	3	Zedekiah		6	7	8	9	10	11	x	12

1 Nisan

Call of Ezekiel

Nis Nis

Julian Year	584	583	582	581	580	579	578	577	576	575	574	573	572	571
Ptolemy	21	22	23	24	25	26	Nebuchadnezzar			30	31	32	33	34
Jeremiah Chronicler	20	21	22	23	24	25	26	27	28	Nebuchadnezzar		32	33	
Ezekiel	13	14	15	Jehoiachin's Captivity			20	21	22	23	24	25	26	

1 Nisan

Julian Year	570	569	568	567	566	565	564	563	562	561	560	559	558	557			
Ptolemy	35	36	37	38	39	40	41	42	43	1	2	1	2	3			
Jeremiah Chronicler	34	35	36	37	Nebuchadnezzar			41	42	43	A	37	1	2	A	1	2
Ezekiel	27	28	Jehoiachin's Captivity			33	34	35	36	S V	2 Kings 25:27 Jer 52:31						

1 Nisan

Amel Marduk

Nergal Sarusur

Julian Year	556	555	554	553	552	551	550	549	548	547	546	545	544	543		
Ptolemy	4	1	2	3	4	5	6	7	8	Nabonidus		11	12	13		
Daniel	3	4	A	1	2	3	4	5	6	7	8	Belshazzar			11	12

Julian Year	542	541	540	539	538	537	536	535	534	533	532	531	530	529				
Ptolemy	14	15	16	17	1	2	3	4	Cyrus		7	8	9	1				
Ezra Daniel	13	14	15	16	17	A	1	2	A	1	2	3 Cyrus		4	5	6	7	A

1 Jan 2 Jan = 1 Thoth

July 16 Darius the Mede

Nis

Julian Year	528	527	526	525	524	523	522	521	520	519	518	517	516	515						
Ptolemy	2	3	4	Cambyses			7	8	1	2	3	4	Darius I		7					
Persian	2	3	Cambyses			6	Nis	S VI	Nis	8	1	2	3	S VII		Nis	5	6	Nis	7
Zechariah	2	3	Cambyses			5	6	7	8	A	1	2	3	Darius I		5	6	7		

Tis Tis Gaunata

S VIII

Tis G. Amos

- A = Accession year.
- S I -- Links Jewish regnal year to Babylonian regnal year. Jer.25:1-3.
- S II -- Ties Ezekiel year to Chronicler designation of Babylonian year. 2 Kings 24:12.
- S III -- Unites Ezekiel year, Jeremiah year and Chronicler year. Ezek.24:1.
- S IV -- Relates Ezekiel year to year the Holy City fell. Ezek.33:21. [Jer.52:31.
- S V -- Ties Chronicler and Jeremiah year of captivity to Babylonian regnal year. 2 Kings 25:27 and Jer 52:31.
- S VI -- Synchronizes Julian date, Persian date and Egyptian date. Cambyses "400" Tablet.
- S VII -- Synchronizes the 4th Kisleu in the 4th year of Darius with 518 B.C. -- a date synchronism. Zach.7:1.
- S VIII -- Identifies Haggai-Zachariah year with Persian year. Hag.1:1 and Zach.1:7.

(W)

BABYLONIAN KINGS

Various Reckonings

1 January 1 Thoth = January 26 April 22

Julian Year	626	625	624	623	622	621	620	619	618	617	616	615	614	613
Ptolemy		1	2	3	4	5	6	Nabopolassar		10	11	12	13	
Jeremiah Chronicler	22	A	1	2	3	4	5	6	Nabopolassar		9	10	11	12
	13	14	15	16	17	18	Josiah		21	22	23	24	25	

1 Tisri Call of Jeremiah 20 Bagart

Julian Year	612	611	610	609	608	607	606	605	604	603	602	601	600	599		
Ptolemy	14	15	16	17	18	19	20	21	1	2	Nebuchadnezzar			6		
Jeremiah Chronicler	13	14	15	16	17	18	19	20	21	A	1	Nebuchadnezzar		4		
	26	27	28	29	30	31	A	1	2	S I		Jehoiakim	5	6	7	8

23rd of Jeremiah

Julian Year	598	597	596	595	594	593	592	591	590	589	588	587	586	585		
Ptolemy	7	8	9	10	11	12	Nebuchadnezzar			16	17	18	19	20		
Jeremiah Chronicler	6	7	8	9	10	Nebuchadnezzar			14	15	16	17	Tis	18	Tis	19
	9	10	11	A	1	2	3	Zedekiah		6	7	8	9	10	11	x
Ezekiel			S II	1	2	3	4	5. Jehoiachin's Captivity			S III	9	10	11	12	

S IV

1 Nisan Call of Ezekiel Nis Nis

Julian Year	584	583	582	581	580	579	578	577	576	575	574	573	572	571	
Ptolemy	21	22	23	24	25	26	Nebuchadnezzar				30	31	32	33	34
Jeremiah Chronicler	20	21	22	23	24	25	26	27	28	Nebuchadnezzar			32	33	
Ezekiel	13	14	15	Jehoiachin's Captivity				20	21	22	23	24	25	26	

1 Nisan

Julian Year	570	569	568	567	566	565	564	563	562	561	560	559	558	557			
Ptolemy	35	36	37	38	39	40	41	42	43	1	2	1	2	3			
Jeremiah Chronicler	34	35	36	37	Nebuchadnezzar			41	42	43	A	37	1	2	A	1	2
Ezekiel	27	28	Jehoiachin's Captivity				33	34	35	36	S V	2 Kings 25:27 Jer 52:31					

1 Nisan Amel Marduk Nergal Sarusur

Julian Year	556	555	554	553	552	551	550	549	548	547	546	545	544	543	
Ptolemy	4	1	2	3	4	5	6	7	8	Nabonidus		11	12	13	
Daniel	3	4	A	1	2	3	4	5	6	7	8	Belshazzar		11	12

Julian Year	542	541	540	539	538	537	536	535	534	533	532	531	530	529			
Ptolemy	14	15	16	17	1	2	3	4	Cyrus		7	8	9	1			
Ezra Daniel	13	14	15	16	17	A	1	2	A	1	2	3 Cyrus		5	6	7	A

Darius the Mede Nis

- A = Accession year.
- S I = First year of Jehoiachin's captivity. 2 Kings 24:12.
- S II = Beginning of the siege on 10 Tebet, Jan. 6, 587 B.C. (Marked "z.") Ezek.24:1; Jer.52:4; 2 Kings 25:1.
- S III = Release of Jehoiachin on 27 Adar, Mar. 24, 560 B.C. (N.M.= Mar.24.) 2 Kings 25:27; Jer.52:31.
- S IV = Fall of Jerusalem on 10 Ab, Aug. 7, 585 B.C. (Marked "x.") "t" = Arrival of messenger in Babylon. Ezek.33:21.
- * The latest dated tablet for Nebuchadnezzar's reign is 43 yr. 5 mo. 9 days. (Ungnad, Vorderasiatische Schriftdenkmaler, Heft III, p. 36.) The latest tablet for Amel Marduk is dated 2 yr. 5 mo. 17 days. (Clay, Babylonian Expedition, Vol. VIII, p. 34.)

Julian	528	527	526	525	524	523	522	521	520	519	518	517	516	515		
N. Era	2	3	4	Cambyses			7	8	1	2	3	4	Darius I			
Jewish	1	2	Cambyses		5	6	S VI	7	8	A	1	2	3 Darius I		5	6

Tis Tis Gaumata Tis

(W)

BABYLONIAN KINGS

(A Study in Old Testament Synchronisms)

Various Reckonings

1 January

26 Jan = 1 Thoth

April 22

Julian Year	626	625	624	623	622	621	620	619	618	617	616	615	614	613
Ptolemy		1	2	3	4	5	6	Nabopolassar		10	11	12	13	
Jeremiah or Jewish	22	A	1	2	3	4	5	6	Nabopolassar		9	10	11	12
	13	14	15	16	17	18	Josiah		21	22	23	24	25	

Tis Call of Jeremiah

Tis

Julian Year	612	611	610	609	608	607	606	605	604	603	602	601	600	599
Ptolemy	14	15	16	17	18	19	20	21	1	2	Nebuchadnezzar		6	
Jeremiah or Jewish	13	14	15	16	17	18	19	20	21	A	1	Nebuchadnezzar		4 5
	26	27	28	29	30	31	A	1	2	Jehoiakim		5	6	7 8

Tis 19 Jan = 1 Thoth

23rd of Jeremiah

Tis

Julian Year	598	597	596	595	594	593	592	591	590	589	588	587	586	585
Ptolemy	7	8	9	10	11	12	Nebuchadnezzar		16	Siege on Tebet		19	20	
Jeremiah & Kings	6	Tis 7	Tis 8	Tis 9	10	Nebuchadnezzar		14	15	16	17	Tis 18	Tis 19	
	9	10	11	A	1	2	3	Zedekiah		6	7	8	9	10

City falls on 10 Ab

Ezekiel

			S II	1	2	3	4	Jehoiachin's Captivity		S III	9	10	11	S IV	12
--	--	--	------	---	---	---	---	------------------------	--	-------	---	----	----	------	----

Messenger arrives on 5 Tebet

Julian Year	584	583	582	581	580	579	578	577	576	575	574	573	572	571
Ptolemy	21	22	23	24	25	26	Nebuchadnezzar		30	31	32	33	34	
Jeremiah	20	21	22	23	24	25	26	27	28	Nebuchadnezzar		32	33	
Ezekiel	13	14	15	Jehoiachin's Captivity			20	21	22	23	24	25	26	

Nis 12 Jan = 1 Thoth

Nis

Julian Year	570	569	568	567	566	565	564	563	562	561	560	559	558	557
Ptolemy	35	36	37	38	39	40	41	42	43	1	2	1	2	3
Jeremiah & Kings	34	Tis 35	36	37	Nebuchadnezzar		41	42	43	A	37	1	2	A
Ezekiel	27	28	29	30	Jehoiachin's Captivity		(35)	(36)	S V					

2 Kgs. 25:27 Jer. 52:31

Nis Amel Marduk----- Nergal Sarusur

Julian Year	556	555	554	553	552	551	550	549	548	547	546	545	544	543
Ptolemy	4	1	2	3	4	5	6	7	8	Nabonidus		11	12	13
Jewish	3	4	A	1	2	3	4	5	6	7	8	Belshazzar		11 12

Tis

Tis

Julian Year	542	541	540	539	538	537	536	535	534	533	532	531	530	529
Ptolemy	14	15	16	17	1	2	3	4	Cyrus		7	8	9	1
Jewish	13	14	15	16	17	A	1	2	A	1	2	3 Cyrus		4 5 6 7 A

1 Jan 2 Jan = 1 Thoth

July 16

Darius the Mede

Nis

Tis

Julian Year	528	527	526	525	524	523	522	521	520	519	518	517	516	515
Ptolemy	2	3	4	Cambyses		7	8	1	2	3	4	Darius I		7
Persian	2	3	Cambyses		6	Nis S VI	Nis 8	1	2	3	S VII		Nis 5	6
Zechariah	2	3	Cambyses		5	6	7	8	A	1	2	3	Darius I 5 6 7	

Nis Nis

Gaumata

Tis

G. Amator

S VIII

A = Accession year. (Post dating.)

S I -- Links Jewish regnal year to Babylonian regnal year. Jer.25:1-3.

S II -- Ties Ezekiel year to the Kings' designation of Babylonian year. 2 Kings 24:12.

S III -- Unites Ezekiel year, Jeremiah year and year of Kings. Ezek.24:1.

S IV -- Relates Ezekiel year to year the Holy City fell. Ezek.33:21.

[Jer.52:31.

S V -- Ties Kings' year and Jeremiah year of captivity to Babylonian regnal year. 2 Kings 25:27 and Jer.52:31.

S VI -- Synchronizes Julian date, Persian date and Egyptian date. Cambyses "400" Tablet.

S VII -- Synchronizes the 4th Kisleu in the 4th year of Darius with 518 B.C. -- a date synchronism. Zach.7:1.

S VIII -- Identifies Haggai-Zachariah year with Persian year. Hag.1:1 and Zach.1:7.

BABYLONIAN KINGS

(Old Testament Synchronisms)

January 1 1 Thoth = Jan 27

April 22 I

Julian	626	625	624	623	622	621	620	619	618	617	616	615	614	613
Ptolemy	Nis	Nis ¹	2	3	4	5	6	7	8	9	10	11	12	13
Babylonian	22	1	2	3	4	5	6	Nabopolassar		9	10	11	12	13
Jeremiah	13	14	15	16	17	Josiah	19	20	21	22	23	24	25	26
	1st year of Jeremiah											Tis	Tis	

Julian	612	611	610	609	608	607	606	605	604	603	602	601	600	599
Ptolemy	Nis ¹⁴	Nis ¹⁵	16	17	18	19	20	21	1	2	Nebuchadnezzar		5	6
Babylonian	14	15	16	17	18	19	20	21	1	2	Nebuchadnezzar		5	6
Jeremiah	27	28	29	30	31	1	2	3	4	Jehoiakim	7	8	9	
	Tis	Tis	23rd year of Jeremiah (Jer. 25:1-3)											

Julian	598	597	596	595	594	593	592	591	590	589	588	587	586	585
Ptolemy	Nis ⁷	Nis ⁸	9	10	11	12	13	14	15	10 Tebet	S i e g e		Nis ²⁰	Nis ²⁰
Babylonian	7	8	9	10	11	12	Nebuchadnezzar		15	16	17	18	19	20
Jewish	10	11	1	2	3	4	Zedekiah		7	8	9	10	11	12
Ezekiel			1	2	3	4	Jehoiachin's Captivity Year			9	10	11	12	
	Tis	Tis	10 Ab											
			Tis Tis Messenger (Ezek.33:21)											

Julian	584	583	582	581	580	579	578	577	576	575	574	573	572	571
Ptolemy	Nis ²¹	Nis ²²	23	24	25	26	27	28	29	30	31	32	33	34
Babylonian	21	22	23	24	25	Nebuchadnezzar		28	29	30	31	32	33	34
Ezekiel	13	14	15	16	17	18	19	Jehoiachin		22	23	24	25	26
	Tis	Tis	July 4	VI Release of Jehoiachin (2 Kings 25:27) (Jer. 52:31)										

Julian	570	569	568	567	566	565	564	563	562	561	560	559	558	557
Ptolemy	Nis ³⁵	Nis ³⁶	37	38	39	40	41	42	43	1	2	1	2	3
Babylonian	35	36	Nebuchadnezzar		39	40	41	42	43	1	2	1	2	3
Ezekiel	27	28	29	30	(31)	(32)	(33)	(34)	(35)	(36)	(37)			
	Tis	Tis	Amel-Marduk Nergal-Sarusur											

Julian	556	555	554	553	552	551	550	549	548	547	546	545	544	543	
Ptolemy	Nis ⁴	Nis ¹	2	3	4	5	6	7	8	9	10	11	12	13	
Babylonian	4	1	2	3	Nabonidus			6	7	8	9	10	11	12	13

Julian	542	541	540	539	538	537	536	535	534	533	532	531	530	529
Ptolemy	Nis ¹⁴	Nis ¹⁵	16	17	1	2	3	4	Cyrus	6	7	8	9	1
Persian	14	15	16	17	1	2	3	4	Cyrus	6	7	8	9	1
Jewish	13	14	15	16	17	1	2	3	4	Cyrus	6	7	8	9
	Tis	Tis	July 16 VII VIII (Zech.7:1) IX (Ezra 6:15)											

Julian	528	527	526	525	524	523	522	521	520	519	518	517	516	515		
Ptolemy	Nis ²	Nis ³	4	5	6	7	8	1	2	3	4	5	6	7		
Persian	2	3	4	Cambyses		6	7	8	1	2	Darius I		4	5	6	7
Zechariah	2	3	4	Cambyses		6	7	8	1	2	Darius I		4	5	6	7
Jewish	1	2	3	4	Cambyses		7	8	1	2	3	4	5	6		
	Tis	Tis														

W

BABYLONIAN KINGS

(A Study in Old Testament Synchronisms)

Various Reckonings

1 January

26 Jan = 1 Thoth

April 28

Julian Year	626	625	624	623	622	621	620	619	618	617	616	615	614	613
Ptolemy		1	2	3	4	5	6	Nabopolassar			10	11	12	13
Jeremiah or Jewish	22	1	2	3	4	5	6	Nabopolassar			9	10	11	12
	13	14	15	16	17	18	Josiah		21	22	23	24	25	

Tis Call of Jeremiah Tis

Julian Year	612	611	610	609	608	607	606	605	604	603	602	601	600	599	
Ptolemy	14	15	16	17	18	19	20	21	1	2	Nebuchadnezzar			6	
Jeremiah or Jewish	13	14	15	16	17	18	19	20	21	1	Nebuchadnezzar			4	5
	26	27	28	29	30	31	1	2	Jehoiakim		5	6	7	8	

Tis 19 Jan = 1 Thoth 23rd of Jeremiah Tis

Julian Year	598	597	596	595	594	593	592	591	590	589	588	587	586	585
Ptolemy	7	8	9	10	11	12	Nebuchadnezzar			16	Siege on Tebet		19	20
Jeremiah & Kings	6	7	8	9	10	Nebuchadnezzar			14	15	16	17	18	19
	9	10	11	1	2	3	Zedekiah		6	7	8	9	10	11

City falls on 10 Ab

Ezekiel														

Messenger arrives on 5 Tebet

Nis Nis Nis Nis Call of Ezekiel Nis Nis

Julian Year	584	583	582	581	580	579	578	577	576	575	574	573	572	571
Ptolemy	21	22	23	24	25	26	Nebuchadnezzar			30	31	32	33	34
Jeremiah	20	21	22	23	24	25	26	27	28	Nebuchadnezzar			32	33
Ezekiel	13	14	15	Jehoiachin's Captivity				20	21	22	23	24	25	26

Nis 12 Jan = 1 Thoth Nis

Julian Year	570	569	568	567	566	565	564	563	562	561	560	559	558	557
Ptolemy	35	36	37	38	39	40	41	42	43	1	2	1	2	3
Jeremiah & Kings	34	35	36	37	Nebuchadnezzar			41	42	43	1	2	1	2
Ezekiel	27	28	29	30	Jehoiachin's Captivity			(35)	(36)	S V				

2 Kgs. 25:27 Jer. 52:31

Nis Nis Amel Marduk Nergal Sarusur

Julian Year	556	555	554	553	552	551	550	549	548	547	546	545	544	543	
Ptolemy	4	1	2	3	4	5	6	7	8	Nabonidus			11	12	13
Jewish	3	4	1	2	3	4	5	6	7	8	Belshazzar			11	12

Tis Tis

Julian Year	542	541	540	539	538	537	536	535	534	533	532	531	530	529	
Ptolemy	14	15	16	17	1	2	3	4	Cyrus		7	8	9	1	
Jewish	13	14	15	16	17	1	2	1	2	Cyrus		4	5	6	7

1 Jan 2 Jan = 1 Thoth July 16 Darius the Mede Nis Tis

Julian Year	528	527	526	525	524	523	522	521	520	519	518	517	516	515			
Ptolemy	2	3	4	Cambyses			7	8	1	2	3	4	Darius I		7		
Persian	2	3	Cambyses			6	Nis	Nis	8	1	2	3	Nis	5	6	Nis	7
Zachariah	2	3	Cambyses			5	6	7	8	1	2	3	Darius I		5	6	7

Nis Nis Gaumata Tis S VIII

- A = Accession year. (Post dating.)
- S I -- Links Jewish regnal year to Babylonian regnal year. Jer. 25:1-3.
- S II -- Ties Ezekiel year to the Kings' designation of Babylonian year. 2 Kings 24:12.
- S III -- Unites Ezekiel year, Jeremiah year and year of Kings. Ezek. 24:1.
- S IV -- Relates Ezekiel year to year the Holy City fell. Ezek. 33:21. [Jer. 52:31.]
- S V -- Ties Kings' year and Jeremiah year of captivity to Babylonian regnal year. 2 Kings 25:27 and Jer. 52:31.
- S VI -- Synchronizes Julian date, Persian date and Egyptian date. Cambyses "400" Tablet.
- S VII -- Synchronizes the 4th Kisleu in the 4th year of Darius with 518 B.C. -- a date synchronism. Zach. 7:1.
- S VIII -- Identifies Haggai-Zachariah year with Persian year. Hag. 1:1 and Zach. 1:7.
- S IX -- Ties full moon on 14 Sivan, July 4, 568 B.C. (Babylonian calendar) to 37th of Nebuchadnezzar II. Observation text reported by P.V. Neugebauer and E.F. Weidner, Leipzig, 1915.

BABYLONIAN KINGS

(Old Testament Synchronisms)

January 1 1 Thoth = Jan 27

April 22 I

Julian	626	625	624	623	622	621	620	619	618	617	616	615	614	613
Ptolemy	Nis	Nis ¹	2	3	4	5	6	7	8	9	10	11	12	13
Babylonian	22	1	2	3	4	5	6	Nabopolassar		9	10	11	12	13
Jeremiah	13	14	15	16	17	Josiah	19	20	21	22	23	24	25	26
	1st year of Jeremiah						1	Jer. 29:10				Tis	Tis	

Julian	612	611	610	609	608	607	606	605	604	603	602	601	600	599
Ptolemy	Nis ¹⁴	Nis ¹⁵	16	17	18	19	20	21	1	2	Nebuchadnezzar		5	6
Babylonian	14	15	16	17	18	19	20	21	II 1	2	Nebuchadnezzar		5	6
Jeremiah	27	28	29	30	31	1	2	3	4	Jehoiakim		7	8	9
	Tis	Tis	23rd year of Jeremiah (Jer. 25:1-3)											

Julian	598	597	596	595	594	593	592	591	590	589	588	587	586	585
Ptolemy	Nis ⁷	Nis ⁸	9	10	11	12	13	14	15	10 Tebet Siege		19	20	
Babylonian	7	8	9	10	11	12	Nebuchadnezzar		15	16	17	18	19	20
Jewish	10	11	1	2	3	4	Zedekiah (vassal king)		8	9	10	11	12	13
Ezekiel	III	1	2	3	4	Jehoiachin's Captivity Year			9	10	11	12	13	
	Tis	Tis	V Messenger (Ezek. 33:21)											

Julian	584	583	582	581	580	579	578	577	576	575	574	573	572	571
Ptolemy	Nis ²¹	Nis ²²	23	24	25	26	27	28	29	30	31	32	33	34
Babylonian	21	22	23	24	25	Nebuchadnezzar		28	29	30	31	32	33	34
Ezekiel	13	14	15	16	17	18	19	Jehoiachin		22	23	24	25	26
	Tis	Tis	July 4	VIII Release of Jehoiachin (2 Kings 25:27; Jer. 52:31)										

Julian	570	569	568	567	566	565	564	563	562	561	560	559	558	557
Ptolemy	Nis ³⁵	Nis ³⁶	37	38	39	40	41	42	43	1	2	1	2	3
Babylonian	35	36	Nebuchadnezzar		39	40	41	42	43	1	2	1	2	3
Ezekiel	27	28	29	30	(31)	(32)	(33)	(34)	(35)	(36)	(37)	IX	1	2
	Tis	Tis	Amel-Marduk Nergal-Sarusur											

Julian	556	555	554	553	552	551	550	549	548	547	546	545	544	543
Ptolemy	Nis ⁴	Nis ¹	2	3	4	5	6	7	8	9	10	11	12	13
Babylonian	4	1	2	3	Nabonidus			6	7	8	9	10	11	12
Jewish	3	4	1	2	3	4	5	6	7	8	9	10	11	12
	Tis	Tis	70 X XI											

Julian	542	541	540	539	538	537	536	535	534	533	532	531	530	529
Ptolemy	Nis ¹⁴	Nis ¹⁵	16	17	1	2	3	4	Cyrus	6	7	8	9	1
Persian	14	15	16	17	1	2	1	2	Cyrus	4	5	6	7	1
Jewish	13	14	15	16	17	1	2	1	2	3	4	5	6	7
	Tis	Tis	XII July 16 XIII XIV											

Julian	528	527	526	525	524	523	522	521	520	519	518	517	516	515
Ptolemy	Nis ²	Nis ³	4	5	6	7	8	1	2	3	4	5	6	7
Persian	2	3	4	Cambyses		6	7	8	1	2	Darius I		4	5
Zechariah	2	3	4	Cambyses		6	7	8	1	2	Darius I		4	5
Jewish	1	2	3	4	Cambyses		7	8	1	2	3	4	5	6
	Tis	Tis	G. Amadon											

PERSIAN KINGS

(The shaded regnal years sustain Bible synchronisms)

1

Julian	528	527	526	525	524	523	522	521	520	519	518	517	516	515	
N.E.	2	3	4	Cambyses			7	8	1	2	3	4	Darius I		
Jewish	1	2	Cambyses		5	6	7	8	A	1	2	Darius I		5	6

Gaumata-----

Julian	514	513	512	511	510	509	508	507	506	505	504	503	502	501
N.E.	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Jewish	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Julian	500	499	498	497	496	495	494	493	492	491	490	489	488	487
N.E.	22	23	24	25	Darius I		28	29	30	31	32	33	34	35
Jewish	21	22	23	24	25	26	27	28	29	30	31	32	33	34

Julian	486	485	484	483	482	481	480	479	478	477	476	475	474	473	
N.E.	36	1	Xerxes			4	5	6	7	8	9	10	11	12	Haman's
Jewish	35	36	A	1	2	3	4	5	6	7	8	9	10	11	12

Julian	472	471	470	469	468	467	466	465	464	463	462	461	460	459				
N.E.	Lot	15	A	16	17	18	19	20	21	Artaxerxes I					3	4	5	6
Jewish	13	14	15	16	17	18	19	20	21	A	1	2	3	4	5			

Julian	458	457	456	455	454	453	452	451	450	449	448	447	446	445	
N.E.	7	8	9	10	11	12	13	14	15	16	17	18	19	E	20
Jewish	6	7	8	9	10	11	12	13	14	15	16	17	18	19	

Julian	444	443	442	441	440	439	438	437	436	435	434	433	432	431
N.E.	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Jewish	20	21	22	23	24	25	26	27	28	29	30	31	32	33

¹ Eclipse on July 16, 523 B.C., 7th Cambyses: Ptolemy, Claudius, "Mathematical Syntexsis," Book 5, pp. 340, 341. Tr. Halma. Paris, 1813. Note: This eclipse of the moon is also confirmed by the Cambyse (400) Tablet, which, as translated by Strasmaier, says: "On the 7th of Cambyses, in the night of the 14th Dazū, 1-1/2 kasbu [3 hours] after the nightfall, the eclipse of the moon was entirely visible. It covered the northern half of the disk of the moon."--Sidersky, David, "Etude sur la chronologie Assyro-Babylonienne," p. 41. Paris, 1916.

² Esther 3:7. Note: The 12th year of Xerxes, Jewish reckoning, is the same as the 13th, Nab. Era.

³ Papyrus "A" (Sayce and Cowley), "year 15 of King Xerxes," 18th Elul = 28th Pachons: Cowley, A., "Jewish Documents of the Time of Ezra," p. 30. London, 1919.

⁴ Papyrus "E" (Sayce and Cowley), "year 19 of Artaxerxes the King," 3rd of Kisleu = 10th Mesore: Cowley, A., "Jewish Documents of the Time of Ezra," p. 42. London, 1919.

Note: The Aramaic dates of the Papyri found at Elephantine, are a little earlier in point of time than their corresponding Jewish dates on the Jerusalem meridian. This may have been due to Babylonian influence, which employed a shorter translation period than was customary among the ancient Jews. Nevertheless, the equated Egyptian and Aramaic dates are so nearly coincident with the Jewish, that they identify the Persian regnal years with their corresponding Julian years.

PERSIAN KINGS

(X)

(The shaded regnal years sustain Bible synchronisms)

	1 January	1 Tisri	1	31 December	30 December										
Julian	528	527	526	525	524	523	522	521	520	519	518	517	516	515	
N. Era	2	3	4	Cambyses			7	8	1	2	3	4	Darius I		7
Jewish	1	2	Cambyses		5	6	7	8	* 1		2	Darius I		5	6
Gaumata-----															
Julian	514	513	512	511	510	509	508	507	506	505	504	503	502	501	
N.E.	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
Jewish	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Julian	500	499	498	497	496	495	494	493	492	491	490	489	488	487	
N.E.	22	23	24	25	Darius I			28	29	30	31	32	33	34	35
Jewish	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
Julian	486	485	484	483	482	481	480	479	478	477	476	475	474	473	
N.E.	36	1	Xerxes			4	5	6	7	8	9	10	11	12	Haman's
Jewish	35	36	* 1	2	3	4	5	6	7	8	9	10	11	12	
Tis Tis															
Julian	472	471	470	469	468	467	466	465	464	463	462	461	460	459	
N.E.	Lot	15	16	17	18	19	20	21	Artaxerxes I			3	4	5	6
Jewish	13	14	15	16	17	18	19	20	21	* 1	2	3	4	5	
Nis Nis															
Julian	458	457	456	455	454	453	452	451	450	449	448	447	446	445	
N.E.	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
Jewish	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Julian	444	443	442	441	440	439	438	437	436	435	434	433	432	431	
N.E.	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
Jewish	20	21	22	23	24	25	26	27	28	29	30	31	32	33	

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* Accession year.

PERSIAN KINGS

(The shaded regnal years sustain Bible synchronisms)

1

Julian	528	527	526	525	524	523	522	521	520	519	518	517	516	515		
N.E.	2	3	4	Cambyzes			7	8	1	2	3	4	Darius I		7	
Jewish	1	2	Cambyzes			5	6	7	8	A	1	2	Darius I		5	6

Gaumata-----

Julian	514	513	512	511	510	509	508	507	506	505	504	503	502	501
N.E.	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Jewish	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Julian	500	499	498	497	496	495	494	493	492	491	490	489	488	487	
N.E.	22	23	24	25	Darius I			28	29	30	31	32	33	34	35
Jewish	21	22	23	24	25	26	27	28	29	30	31	32	33	34	

Julian	486	485	484	483	482	481	480	479	478	477	476	475	474	473	
N.E.	36	1	Xerxes			4	5	6	7	8	9	10	11	12	Haman's
Jewish	35	36	A	1	2	3	4	5	6	7	8	9	10	11	12

Julian	472	471	470	469	468	467	466	465	464	463	462	461	460	459		
N.E.	Lot	15 "A"	16	17	18	19	20	21	Artaxerxes I			3	4	5	6	
Jewish	13	14	15	16	17	18	19	O B	20	21	A	1	2	3	4	5

Julian	458	457	456	455	454	453	452	451	450	449	448	447	446	445
N.E.	7	8	9	10	11	12	13	14	15	16	17	18	19 "E"	20
Jewish	6	7	8	9	10	11	12	13	14	15	16	17	18	19

Julian	444	443	442	441	440	439	438	437	436	435	434	433	432	431
N.E.	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Jewish	20	21	22	23	24	25	26	27	28	29	30	31	32	33

¹ Eclipse on July 16, 525 B.C., 7th Cambyzes: Ptolemy, Claudius, "Mathematical Syntaxis," Book 5, pp. 340, 341. Tr. Halma. Paris, 1813. Note: This eclipse of the moon is also confirmed by the Cambyse (400) Tablet, which, as translated by Strassmaier, says: "On the 7th of Cambyzes, in the night of the 14th Dazū, 1-1/2 kasbu [3 hours] after the nightfall, the eclipse of the moon was entirely visible. It covered the northern half of the disk of the moon."--Sidersky, David, "Etude sur la chronologie Assyro-Babylonienne," p. 41. Paris, 1916.

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⁴ Papyrus "E" (Sayce and Cowley), "year 19 of Artaxerxes the king," 3rd of Kislev = 10th Mesore: Cowley, A., "Jewish Documents of the Time of Ezra," p. 42. London, 1919.

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PERSIAN KINGS

(X)

(The shaded regnal years sustain Bible synchronisms)

	1 January		1 Tisri			1		31 December			30 December					
Julian	528	527	526	525	524	523	522	521	520	519	518	517	516	515		
N. Era	2	3	4	Cambyzes			7	8	1	2	3	4	Darius I		7	
Jewish	1	2	Cambyzes		5	6	7	8	A*		1	2	Darius I		5	6
	Gaumata-----															
Julian	514	513	512	511	510	509	508	507	506	505	504	503	502	501		
N.E.	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
Jewish	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
Julian	500	499	498	497	496	495	494	493	492	491	490	489	488	487		
N.E.	22	23	24	25	Darius I			28	29	30	31	32	33	34	35	
Jewish	21	22	23	24	25	26	27	28	29	30	31	32	33	34		
Julian	486	485	484	483	482	481	480	479	478	477	476	475	474	473		
N.E.	36	1	Xerxes			4	5	6	7	8	9	10	11	12	Haman's	2
Jewish	35	36	A*		1	2	3	4	5	6	7	8	9	10	11	12
	Tis Tis															
Julian	472	471	470	469	468	467	466	465	464	463	462	461	460	459		
N.E.	Lot	15	16	17	18	19	20	21	Artaxerxes I			3	4	5	6	
Jewish	13	14	15	16	17	18	19	20	21	A*		1	2	3	4	5
	Nis Nis															
Julian	458	457	456	455	454	453	452	451	450	449	448	447	446	445		
N.E.	7	8	9	10	11	12	13	14	15	16	17	18	19	20	E	4
Jewish	6	7		8	9	10	11	12	13	14	15	16	17	18	19	
Julian	444	443	442	441	440	439	438	437	436	435	434	433	432	431		
N.E.	21	22	23	24	25	26	27	28	29	30	31	32	33	34		
Jewish	20	21	22	23	24	25	26	27	28	29	30	31	32	33		

¹ Eclipse on July 16, 523 B.C., 7th Cambyzes: Ptolemy, Claudius, "Mathematical Syntaxis," Book 5, pp. 340, 341. Tr. Halma. Paris, 1813. Note: This eclipse of the moon is also confirmed by the Cambyse (400) Tablet, which, as translated by Strassmaier, says: "On the 7th of Cambyzes, in the night of the 14th Dazū, 1-1/2 kasbu [3 hours] after the nightfall, the eclipse of the moon was entirely visible. It covered the northern half of the disk of the moon."--Sidersky, David, "Etude sur la chronologie Assyro-Babylonienne," p. 41. Paris, 1916.

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* Accession year.

PERSIAN KINGS

(X)

(The shaded regnal years sustain Bible synchronisms)

1

Julian	528	527	526	525	524	523	522	521	520	519	518	517	516	515	
N.E.	2	3	4	Cambyses			7	8	1	2	3	4	Darius I		7
Jewish	1	2	Cambyses		5	6	7	8	A	1	2	Darius I		5	6

Gaumata-----

Julian	514	513	512	511	510	509	508	507	506	505	504	503	502	501
N.E.	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Jewish	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Julian	500	499	498	497	496	495	494	493	492	491	490	489	488	487
N.E.	22	23	24	25	Darius I		28	29	30	31	32	33	34	35
Jewish	21	22	23	24	25	26	27	28	29	30	31	32	33	34

Julian	486	485	484	483	482	481	480	479	478	477	476	475	474	473	
N.E.	36	1	Xerxes			4	5	6	7	8	9	10	11	12	Haman's
Jewish	35	36	A	1	2	3	4	5	6	7	8	9	10	11	12

Julian	472	471	470	469	468	467	466	465	464	463	462	461	460	459		
N.E.	Lot	15	A	16	17	18	19	20	21	Artaxerxes I			3	4	5	6
Jewish	13	14	15	16	17	18	19	20	21	A	1	2	3	4	5	

Julian	458	457	456	455	454	453	452	451	450	449	448	447	446	445	
N.E.	7	8	9	10	11	12	13	14	15	16	17	18	19	E	20
Jewish	6	7	8	9	10	11	12	13	14	15	16	17	18	19	

Julian	444	443	442	441	440	439	438	437	436	435	434	433	432	431
N.E.	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Jewish	20	21	22	23	24	25	26	27	28	29	30	31	32	33

¹ Eclipse on July 16, 523 B.C., 7th Cambyses: Ptolemy, Claudius, "Mathematical Syntexsis," Book 5, pp. 340, 341. Tr. Halma. Paris, 1813. Note: This eclipse of the moon is also confirmed by the Cambyse (400) Tablet, which, as translated by Strasmaier, says: "On the 7th of Cambyses, in the night of the 14th Dazū, 1-1/2 kasbu [3 hours] after the nightfall, the eclipse of the moon was entirely visible. It covered the northern half of the disk of the moon."--Sidersky, David, "Etude sur la chronologie Assyro-Babylonienne," p. 41. Paris, 1916.

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PERSIAN KINGS

⊗

(The shaded regnal years sustain Bible synchronisms)

1 January 1 Tisri 1 31 December 30 December

Julian	514	513	512	511	510	509	508	507	506	505	504	503	502	501
N.E.	8	9	10	11	12	13	14	15	16	17	18	19	20	21
Jewish	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Julian	500	499	498	497	496	495	494	493	492	491	490	489	488	487
N.E.	22	23	24	25	Darius I		28	29	30	31	32	33	34	35
Jewish	21	22	23	24	25	26	27	28	29	30	31	32	33	34

Julian	486	485	484	483	482	481	480	479	478	477	476	475	474	473	
N.E.	36	1	Xerxes			4	5	6	7	8	9	10	11	12	Haman's
Jewish	35	36	A	1	2	3	4	5	6	7	8	9	10	11	12
															Tis Tis

Julian	472	471	470	469	468	467	466	465	464	463	462	461	460	459	
N.E.	Lot	15 "A"	16	17	18	19	20	21	Artaxerxes I			3	4	5	6
Jewish	13	14	15 "A"	16	17	18	19	20	21	A	* 1	2	3	4	5
	Nis	Nis	Tis												

Julian	458	457	456	455	454	453	452	451	450	449	448	447	446	445
N.E.	7	8	9	10	11	12	13	14	15	16	17	18	19 "E"	20
Jewish	6	7	8	9	10	11	12	13	14	15	16	17	18	19 "E"
														Tis

Julian	444	443	442	441	440	439	438	437	436	435	434	433	432	431
N.E.	21	22	23	24	25	26	27	28	29	30	31	32	33	34
Jewish	20	21	22	23	24	25	26	27	28	29	30	31	32	33

¹ Eclipse on July 16, 523 B.C., 7th Cambyses: Ptolemy, Claudius, "Mathematical Syntaxsis," Book 5, pp. 340, 341. Tr. Halma. Paris, 1813. Note: This eclipse of the moon is also confirmed by the Cambyse (400) Tablet, which, as translated by Strassmaier, says: "On the 7th of Cambyses, in the night of the 14th Dazū, 1-1/2 kasbu [3 hours] after the nightfall, the eclipse of the moon was entirely visible. It covered the northern half of the disk of the moon."--Sidersky, David, "Etude sur la chronologie Assyro-Babylonienne," p. 41. Paris, 1916.

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* Accession year.

Y

PERSIAN KINGS

1 January B.C. 1 Tisri (The shaded regnal years sustain synchronisms) 20 December

Julian	486	485	484	483	482	481	480	479	478	477	476	475	474	473	
N. Era	36	1	Xerxes		4	5	6	7	8	9	10	11	12	Haman's	
Jewish	35	36	A	1	2	3	4	5	6	7	8	9	10	11	12
Persian	35	36	1	2	3	4	5	6	7	8	9	10	11	12	

1 Nisan

Julian	472	471	470	469	468	467	466	465	464	463	462	461	460	459		
N. Era	Lot	15	A	16	17	18	19	20	21	Artaxerxes I			3	4	5	6
Jewish	13	14	15	16	17	18	19	B	20	21	A	1	2	3	4	5
Persian	13	14	15	16	17	18	19	20	21	1	2	3	4	5		

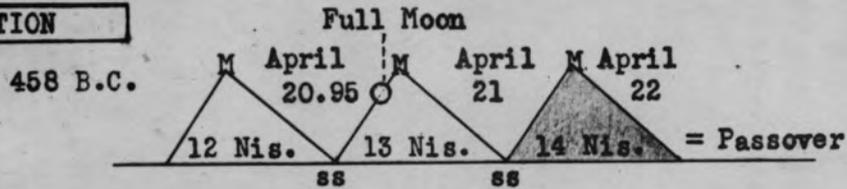
Nisan Nisan

Julian	458	457	456	455	454	453	452	451	450	449	448	447	446	445	
N. Era	7	8	9	10	11	12	13	14	15	16	17	18	19	E	20
Jewish	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
Persian	6	7	8	9	10	11	12	13	14	15	16	17	18	19	

Julian	444	443	442	441	440	439	438	437	436	435	434	433	432	431	
N. Era	21	22	23	24	25	26	27	28	29	30	31	32	33	34	
Jewish	20	21	22	23	F	24	25	26	27	28	29	30	31	32	33
Persian	20	21	22	23	24	25	26	27	28	29	30	31	32	33	

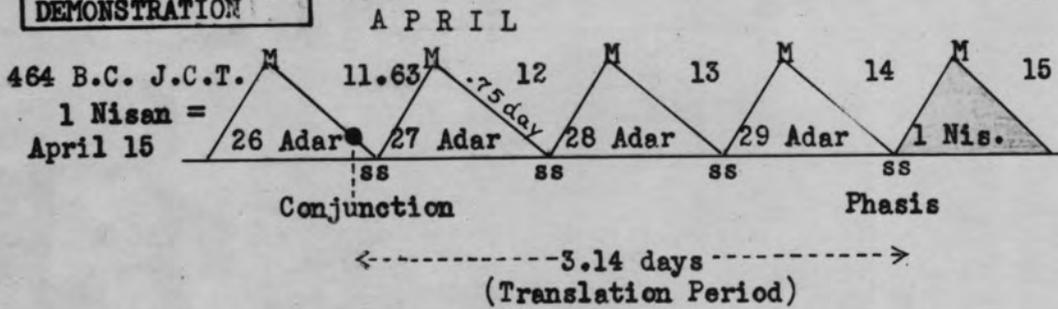
Before any scripture date can be verified, it must be ascertained what calendar the writer employed who introduced the date. The difference between the Jewish and Babylonian calendars is easily determined by the designation of the months, and also by the order of the months mentioned. For example, Nehemiah gives three Persian names to the three months he introduces--Kisleu, Nisan and Elul. But these three months each belong to the 20th year of Artaxerxes, as can be proved from the context. Nehemiah must therefore have been reckoning in terms of a luni-solar calendar that ran from Tisri to Tisri, namely the Jewish. If the order of his months had been Nisan, Elul, Kisleu, in any one year of the king's reign, then he would have been using the Persian calendar, from spring to spring.

DEMONSTRATION



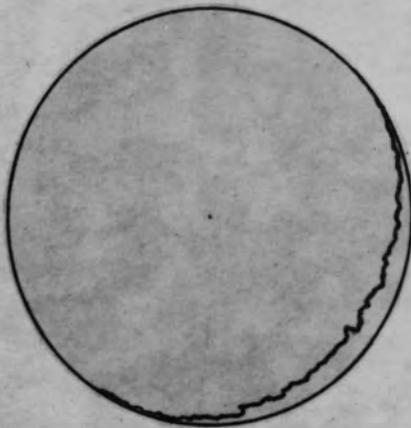
14 Nisan is the next day after 13 Nisan, the Jewish day of full moon; but the civil date of 14 Nisan, or April 22, is the second day after April 20, the civil date of full moon.

DEMONSTRATION



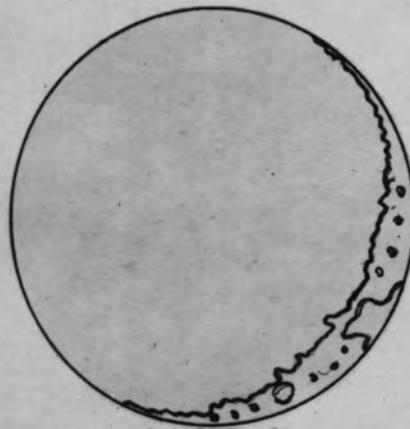
1. Subtract decimal part of conjunction date (.63) from 1 day = .37
 2. Add to it .75 day for the period from midnight to mean ss = .75
 3. Add days from ss of 12th to ss of 14th = 2.
 4. Add .02 day for deferred sunset on April 14 = .02
- Translation Period = 3.14 days

First Moon

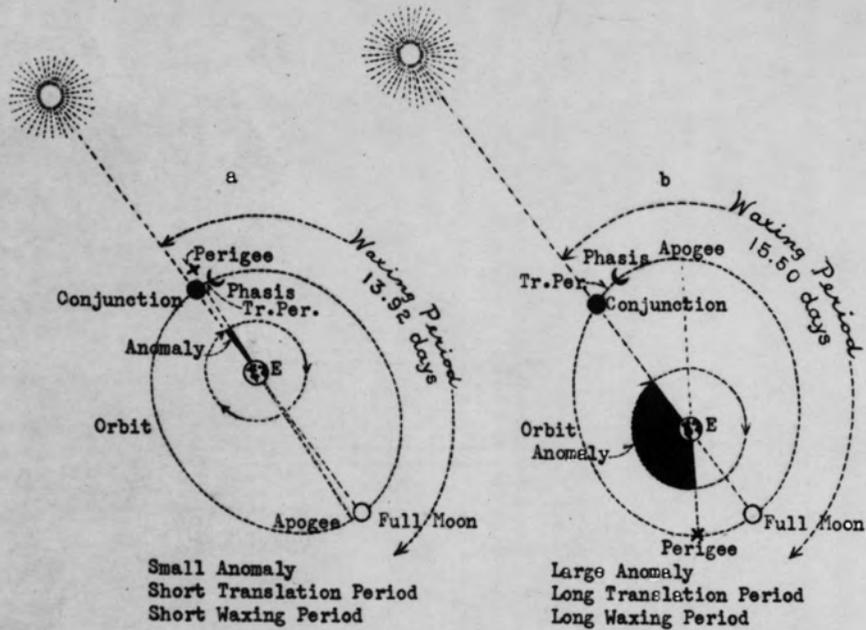


Observed at Gedanum--13° in Taurus,
south latitude, perigee.
1644 A.D., April 8, 8:00 p.m.
First day after conjunction.

Second Moon

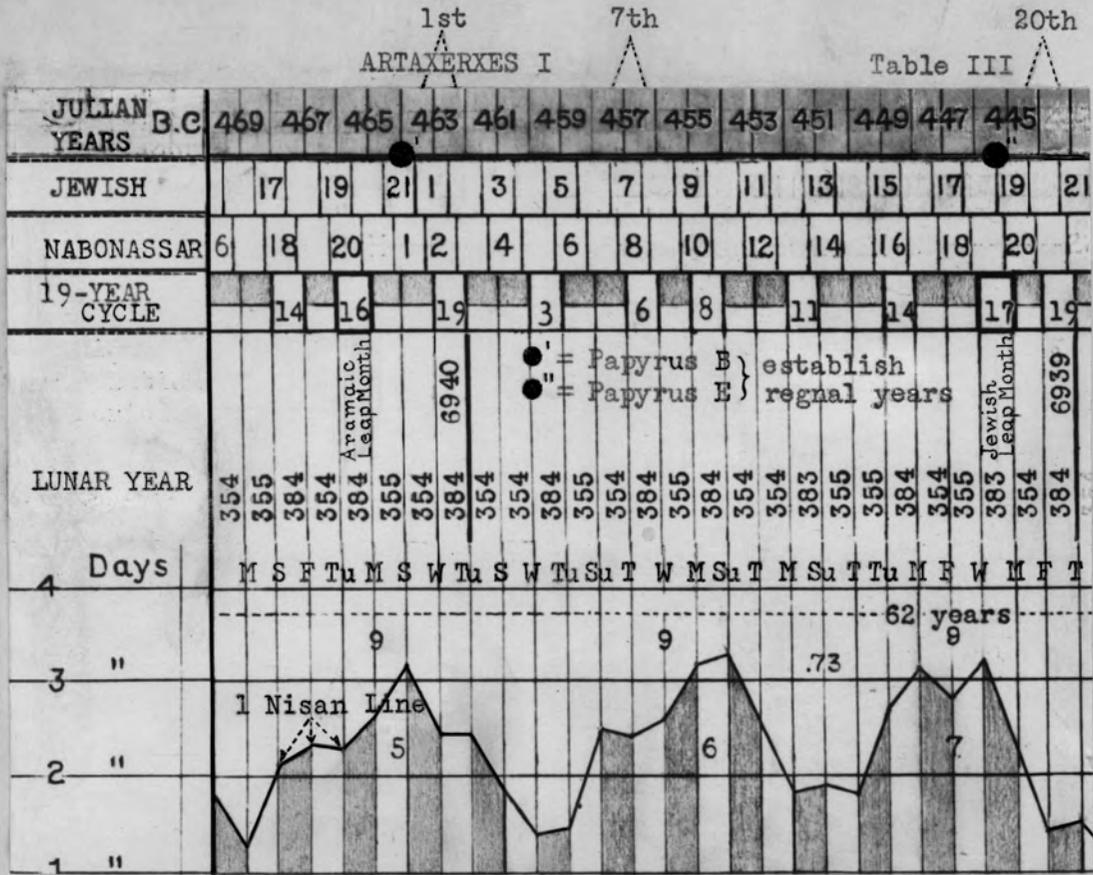


Observed at Gedanum--14° in Aries,
south latitude, apogee.
1645 A.D., February 28, 7:00 p.m.
Second day after conjunction.

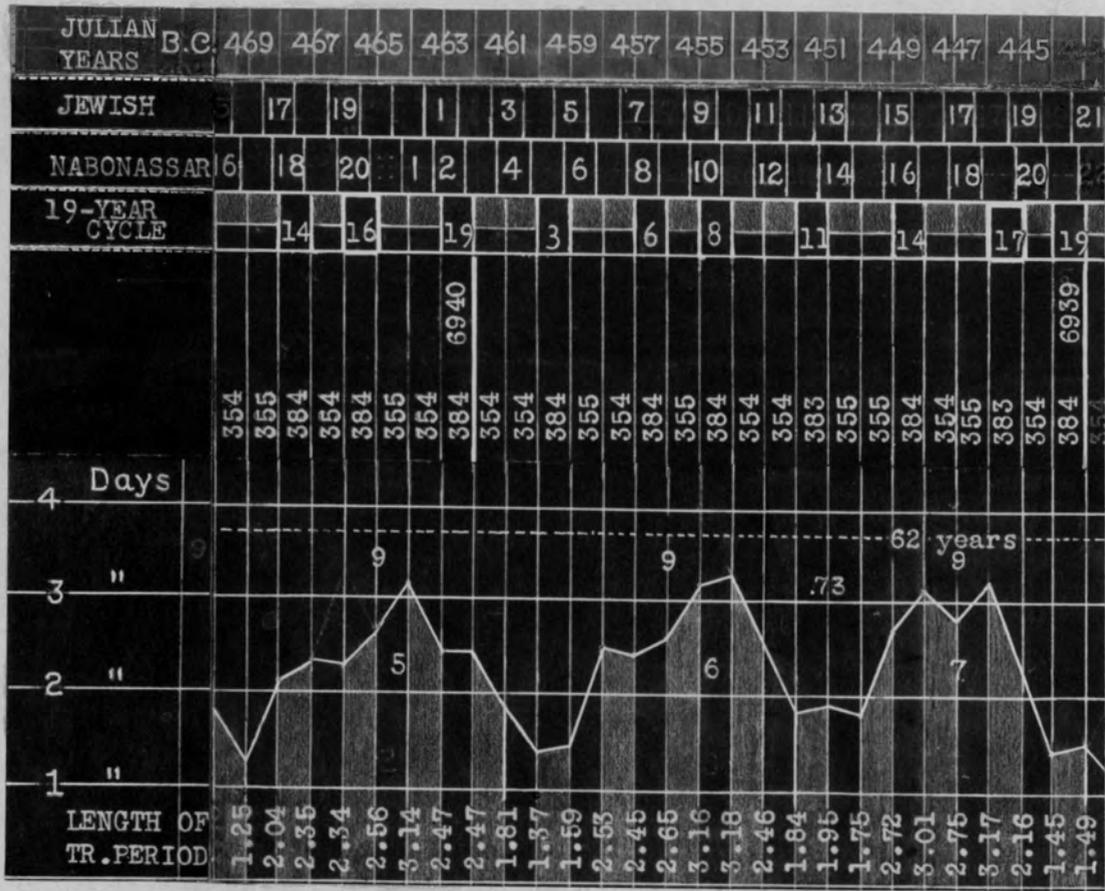


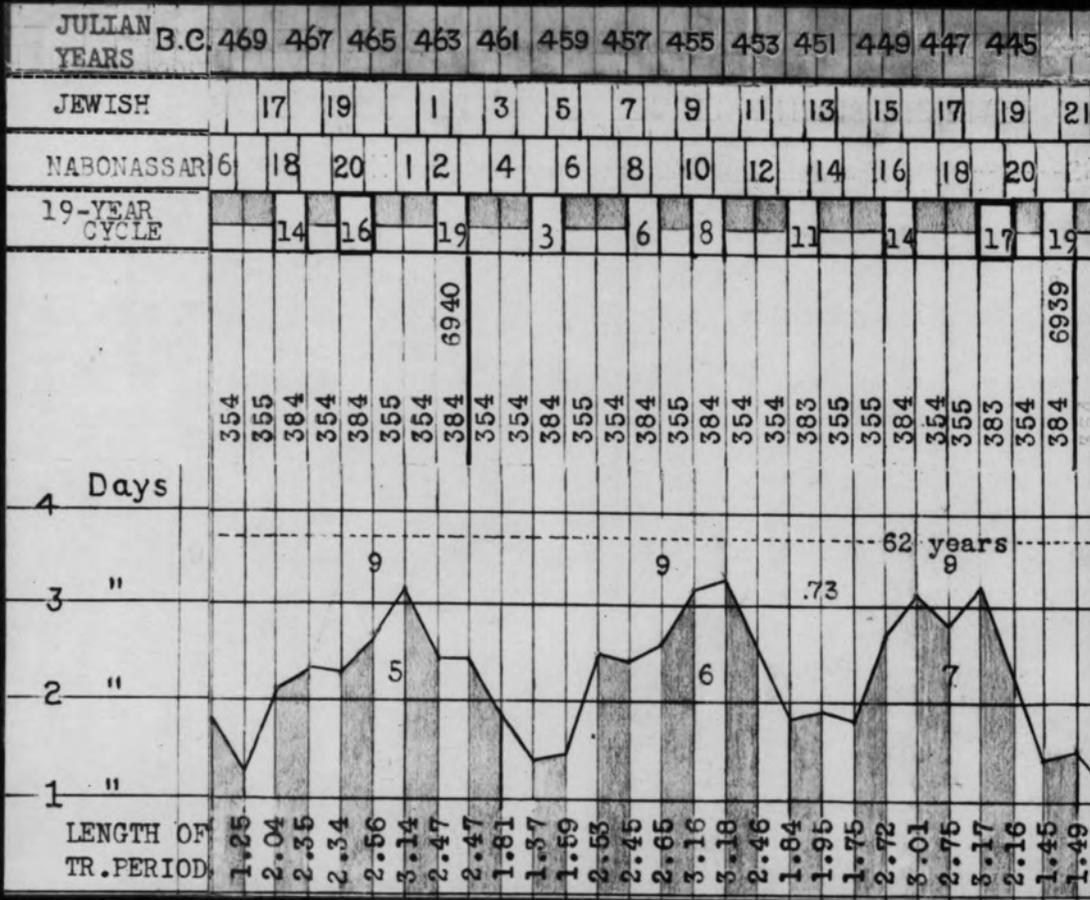
The relation between the Waxing Period and Translation Period can be substituted for the relation between the Waxing Period and the Anomaly, for which there are no prepared tables in early centuries.

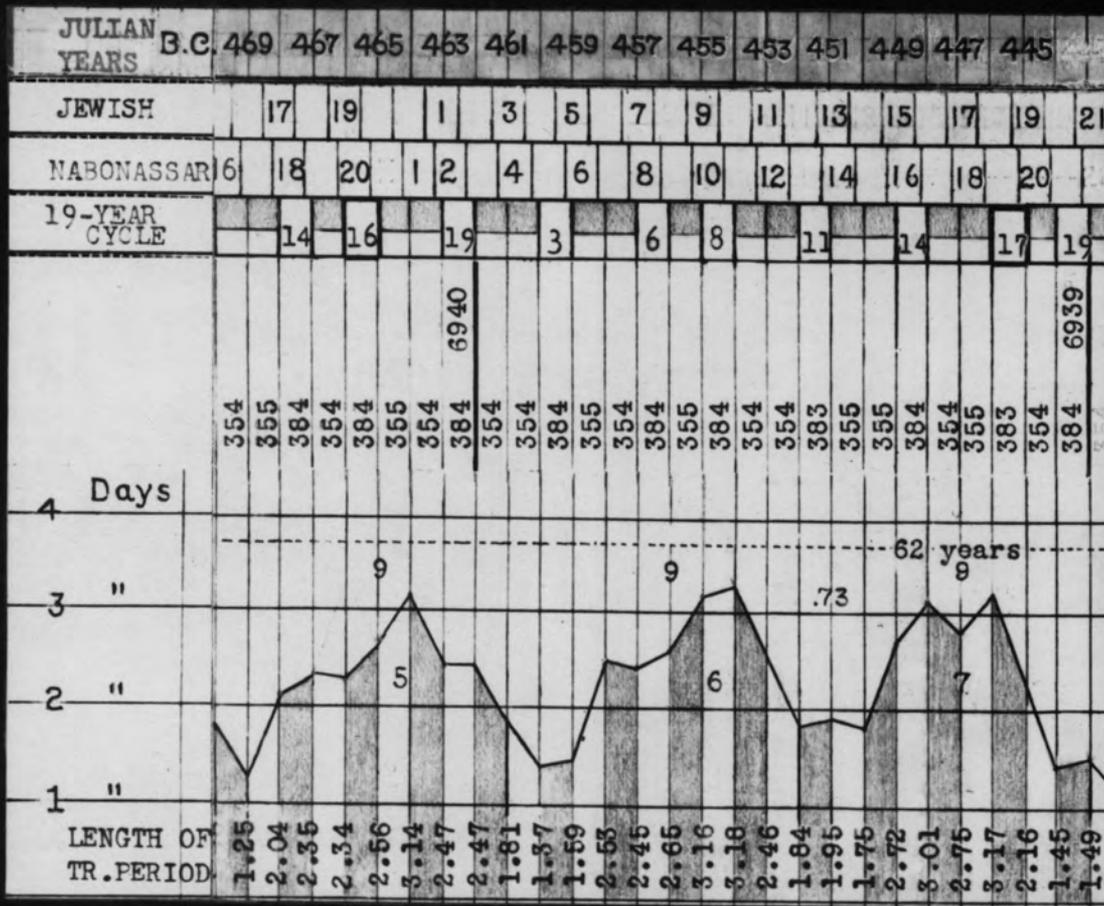
		30 days	30	30	30	
621 B.C.	9/3 (Ululu)	10/3	11/2	12/2	1/1 (Tebet)	
436 B.C.	8/29 (Ululu)	9/28	10/28	11/27	12/27 (Tebet)	
136 B.C.	7/14 (Duzu)	8/13	9/12	10/12	11/11 (Arahsamnu)	
119 B.C.	8/5 (Abu)	9/4	10/4	11/3	12/3 (Kislimu)	
117 B.C.	8/12 (Abu)	9/11	10/11	11/10	12/10 (Kislimu)	
111 B.C.	5/10 (Aiaru)	6/9	7/9	8/8	9/7 (Ululu)	
33 A.D.	6/17 (Simanu)	7/17	8/16	9/15	10/15 (Tashritu)	

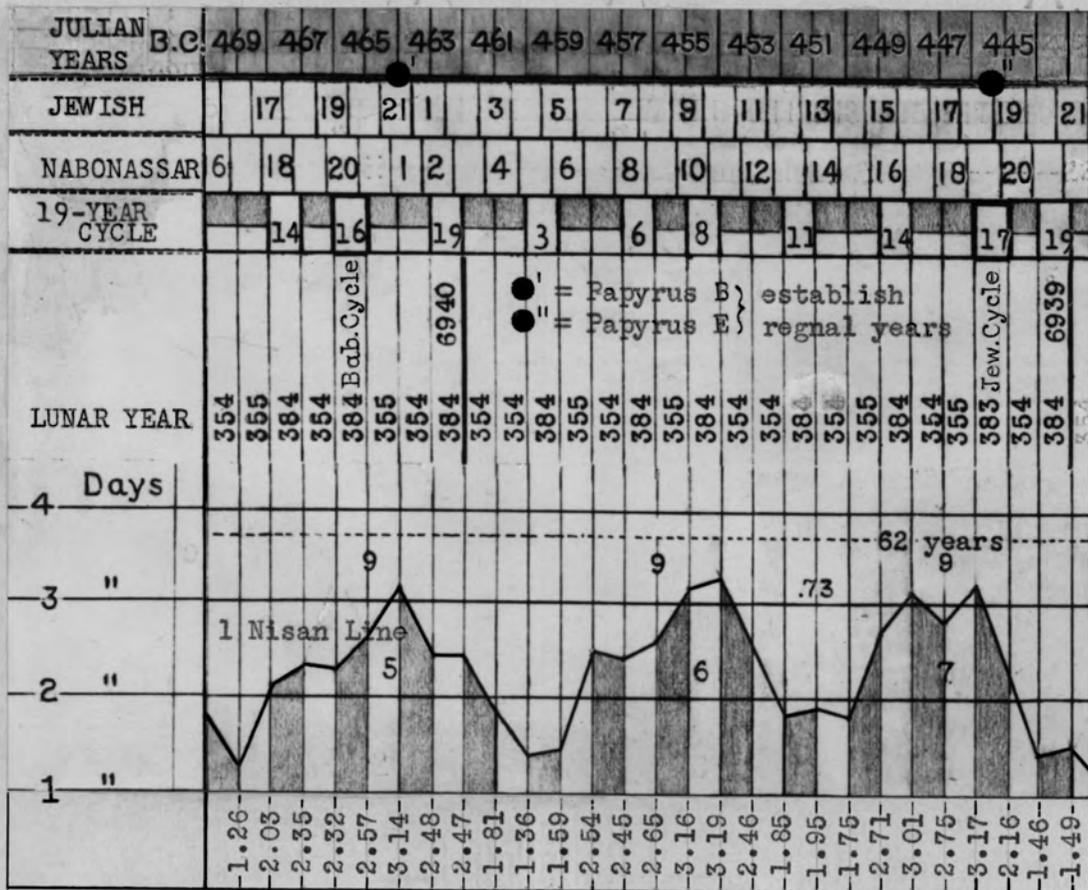


Conjunction Line



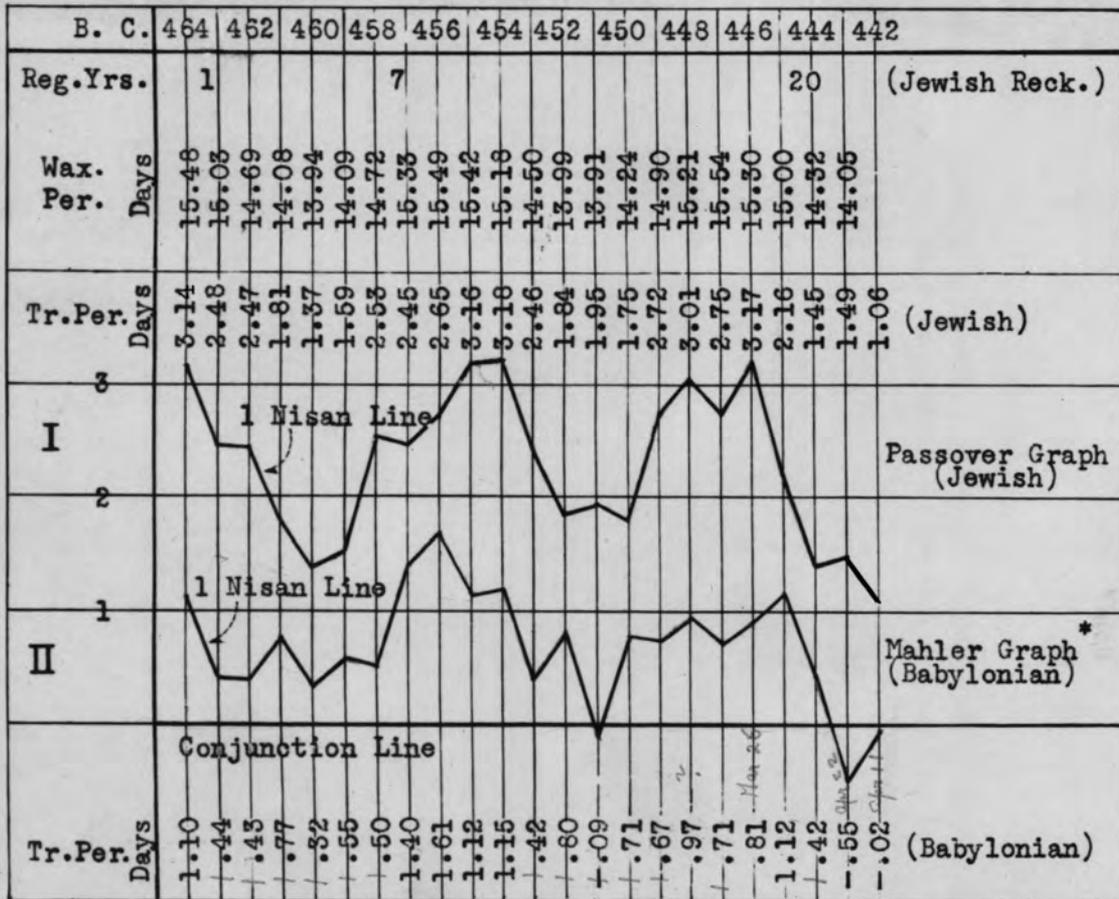






- b. In three instances, they occur even before the conjunction, which is conflicting with a moon that is observed only.
- c. In five other years, the calendar phasis is too soon after conjunction for the moon to be actually seen--years 463, 462, 460, 453, and 444.

J ARTAXERXES I



* Mahler, Eduard, "Zur Chronologie der Babylonier," Sitzungsber. der kais. Akad. d. Wiss., math.-naturw. Cl. März-Heft 1892. Computed from Table, p. 652.

On the contrary, Graphs I and II have two important points in common: they both follow the same intercalary cycle, and they both have the same general trend; that is, they are both in swing with the moon's anomaly, as indicated by the length of the waxing period.

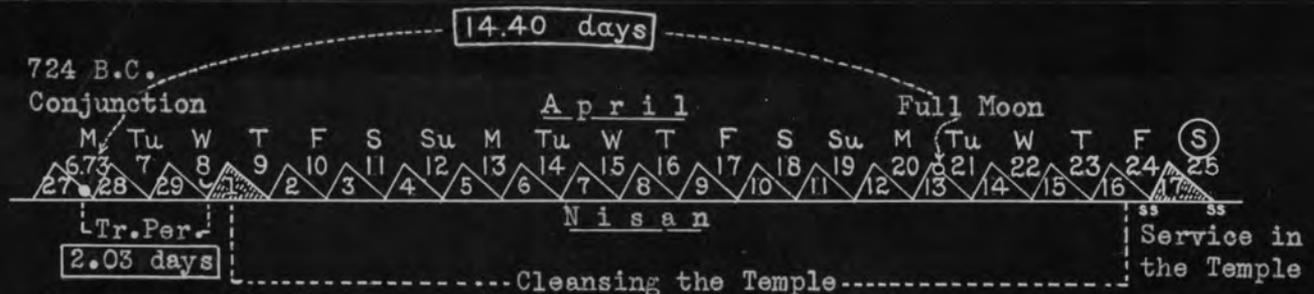
Therefore, the obvious conclusion, that although the ancient Babylonian

Nisan Translation Period in First Year of Hezekiah: The accompanying series of moon dates pertains to the first month of Hezekiah's first year. The moon's phases for this year are computed from Schram's Tables--cf. Appendix, Part II, Table "e".

First Year of Hezekiah (724 B.C.)	
1 Nisan	= April 9, Thursday
Full Moon	= April 21.13, J.C.T.
Conjunction	= April 6.73, " Monday
Waxing Period	= 14.40 days (21.13 - 6.73)
Tr. Period	= April 22, Wednesday

The following diagram illustrates the Translation Period:

Figure 20



ASTRONOMICAL ARGUMENT: The position of the conjunction in 724 B.C. is such that the only possible length for the Tr. Period is either 1.03, 2.03, or 3.03 days. It cannot be more or less, nor can it be any intervening figure. The Waxing Period of 14.40 days points at once to 2.03 days as the corresponding translation interval. For, if it were 3.03 days, the Waxing Period would have to be at least 15 days long, while a Translation Period of 1.03 days would demand around 14 days only. (Cf. Table Q.) Hence 1 Nisan must have coincided with Thursday, April 9, and 17 Nisan, with Sabbath, April 25.

The Bible narrative is also conclusive that Hezekiah's temple service took place on the Sabbath, as indicated by (1) the number of animals in the burnt-offering, and (2) the blowing of the trumpets throughout the burnt sacrifice.

BIBLE ARGUMENT: (1) The special burnt-offering for the day was one "for all Israel" (verse 24). It was about seven times larger than usual (Num. 28:1-8). Ordinarily, on the Sabbath, a double burnt-offering was sacrificed, besides the regular continual, making six lambs in all for the day. Ezekiel suggests "six lambs" and "a ram" for the Sabbath (Ezek. 46:4). Consequently, Hezekiah's burnt-offering of seven rams and seven lambs was sufficiently large enough to identify the Sabbath service. The sin-offering of seven he goats was also similarly large.

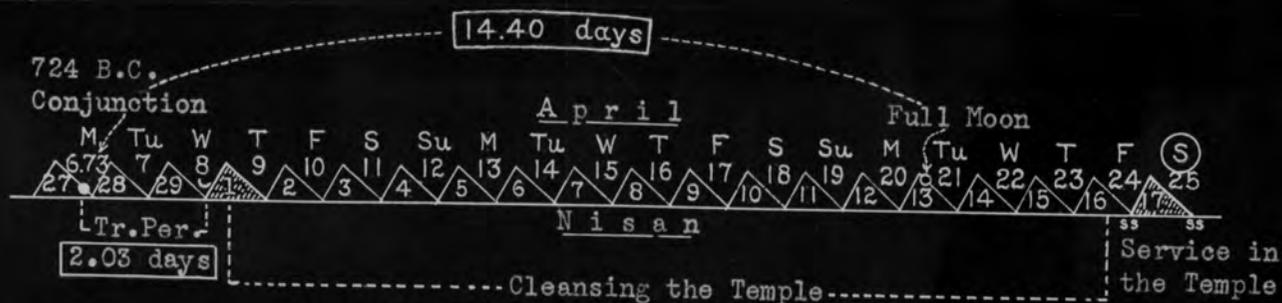
Nisan Translation Period in First Year of Hezekiah: The accompanying series of moon dates pertains to the first month of Hezekiah's first year. The moon's phases for this year are computed from Schram's Tables—

First Year of Hezekiah
(724 B.C.)

1 Nisan	=	April 9, Thursday
Full Moon	=	April 21.13, J.C.T.
Conjunction	=	April 6.73, " Monday
Waxing Period	=	14.40 days (21.13 — 6.73)
Tr. Period	=	April 22, Wednesday

The following diagram illustrates the Translation Period:

Figure 20



ASTRONOMICAL ARGUMENT: The position of the conjunction in 724 B.C. is such that the only possible length for the Tr. Period is either 1.03, 2.03, or 3.03 days. It cannot be more or less, nor can it be any intervening figure. The Waxing Period of 14.40 days points at once to 2.03 days as the corresponding translation interval. For, if it were 3.03 days, the Waxing Period would have to be at least 15 days long, while a Translation Period of 1.03 days would demand around 14 days only. (Cf. Table Q.) Hence 1 Nisan must have coincided with Thursday, April 9, and 17 Nisan, with Sabbath, April 25.

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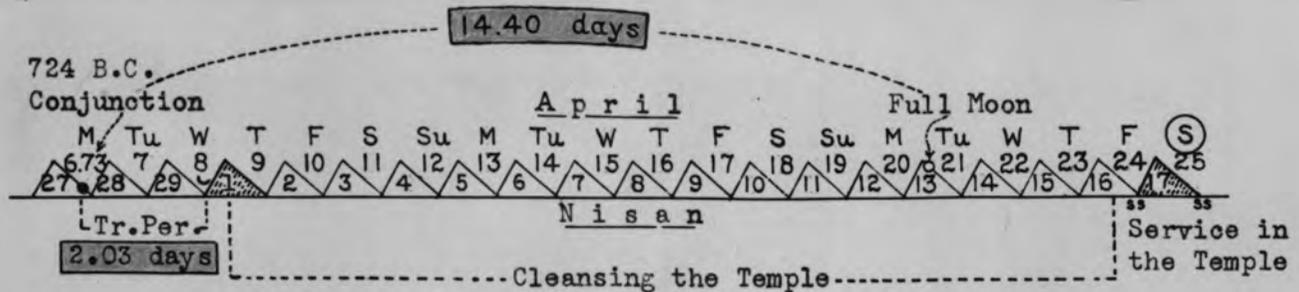
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Nisan Translation Period in First Year of Hezekiah: The accompanying series of moon dates pertains to the first month of Hezekiah's first year. The moon's phases for this year are computed from Schram's Tables--cf. Appendix, Part II, Table "e".

First Year of Hezekiah (724 B.C.)	
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Full Moon	= April 21.13, J.C.T.
Conjunction	= April 6.73, " Monday
Waxing Period	= 14.40 days (21.13 - 6.73)
Tr. Period	= April 22, Wednesday

The following diagram illustrates the Translation Period:

Figure 20



ASTRONOMICAL ARGUMENT: The position of the conjunction in 724 B.C. is such that the only possible length for the Tr. Period is either 1.03, 2.03, or 3.03 days. It cannot be more or less, nor can it be any intervening figure. The Waxing Period of 14.40 days points at once to 2.03 days as the corresponding translation interval. For, if it were 3.03 days, the Waxing Period would have to be at least 15 days long, while a Translation Period of 1.03 days would demand around 14 days only. (Cf. Table Q.) Hence 1 Nisan must have coincided with Thursday, April 9, and 17 Nisan, with Sabbath, April 25.

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14.40 days

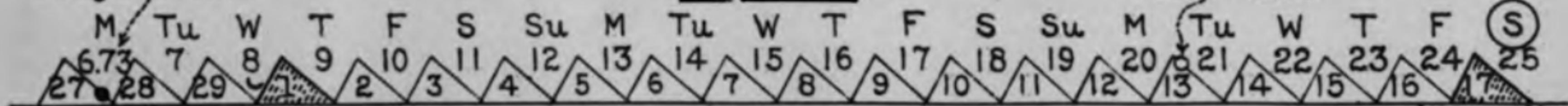
724 B.C.

Conjunction

Wax. Per.

April

Full Moon



Tr. Per.

2.03 days

Nisan

Service in the Temple

.....Cleansing the Temple.....



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