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## BABYLONIAN CHRONOLOGY 626 B.C.-A.D. 45

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# BABYLONIAN <br> CHRONOLOGY <br> 626 B.C.-A.D. 45 

Br RICHARD A. PARKER AND WALDO H. DUBBERSTEIN



THE ORIENTAL INSTITUTE OF THE UNIVERSITY OF CHICAGO STUDIES IN ANGIENT ORIENTAL CIVILIZATION • NO. 24

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PREFACE
This study aims at providing a brief, but complete and thorough, presentadion of the data bearing upon the chronological problems of the Neo-BabyIonian, Achaemenid Persian, and Seleucid periods, together with tables for the easy translation of dates from the Babylonian calendar into the Julian.

Recent additions to our knowledge of intercalary months in the Neo-Babylonian and Persian periods have enabled us to improve upon the results of our predecessors in this field, though our great debt to F. X. Kugler and D. Sidersky for providing the background of our work is obvious.

While our tables are intended primarily for historians, both classical and oriental, biblical students also should find them useful, as any biblical date of this period given in the Babylonian calendar can be translated by our tables.

In the preparation of this study we have enjoyed the fullest cooperation from our colleagues in the Oriental Institute. Professors F. W. Geers and G. G. Cameron and Dr. R. T. Hallock have been especially helpful. In matters astronomical we have conferred with Dr. J. L. Greenstein of the University of Chicago and with Professor Otto Neugebauer of Brown University, who has kindly read and criticized most of the manuscript. The painstaking editorial supervision of Dr. T. G. Allen eliminated several blunders.

To one other, however, must go our greatest thanks. It was his seminar in Achaemenid history which stimulated our interest in the chronology of that time, and his own enthusiasm for chronological studies has never permitted our own to flag. In friendship and in appreciation for generous and ever-ready assistance we dedicate this study to Professor Albert Ten Eyck Olmstead.

Richard A. Parker
Waldo H. Dubberstein

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& \text { III }(19+4) 43-46 .
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## LIST OF ABBREVIATIONS

| A | Chicago. University. Oriental Institute Museum. Asiatic collection. (Followed by registration number.) |
| :---: | :---: |
| AJSL | American journal of Semitic languages and literatures (Chicago etc., 1884-1941). |
| Assurbanipal | Streck, Maximilian. Assurbanipal und die letzten assyrischen Könige bis zum Untergange Nineveh's ("Vorderasiatische Bibliothek" VII [3 vols.; Leipzig, 1916]). |
| $B E$ | Pennsylvania. University. The Babylonian expedition of the University of Pennsylvania. Series A: Cuneiform texts, ed. by H. V. Hilprecert (Philadelphia, 1893-1914). |
| $B E$ VIII 1 | Clay, Albert T. Legal and commercial transactions dated in the Assyrian, Neo-Babylonian and Persian periods (1908). |
| $B E$ IX | Hilprecht, H. V., and Clay, Albert T. Business documents of Murashû sons of Nippur dated in the reign of Artaxerxes I (1898). |
| $B E \mathrm{X}$ | Clay, Albert T. Business documents of Murashû sons of Nippur dated in the reign of Darius II (1904). |
| BHT | Smith, Sidney. Babylonian historical texts relating to the capture and downfall of Babylon (London, 1924). |
| BM | British Museum. |
| BRLM | Babylonian records in the library of J. Pierpont Morgan, ed. by ALbert T. Clay (New York, 1912 -). |
| $B R L M$ I | Clay, Albert T. Babylonian business transactions of the first millennium b.c. (1912). |
| BRLM II | Clay, Albert T. Legal documents from Erech dated in the Seleucid era (1913). |
| BRVU | Krückmann, Oluf. Babylonische Rechts- und Verwaltungs-Urkunden aus der Zeit Alexanders und der Diadochen (Weimar, 1931). |
| Cambyses | Strassmarer, J. N. Inschriften von Cambyses, König von Babylon ("Babylonische Texte" [V] Heft 8-9 [Leipzig, 1890]). |
| $C T$ | British Museum. Cuneiform texts from Babylonian tablets, \&ce, in the British Museum (London, 1896--). |
| Cyrus | Strassmaier, J. N. Inschriften von Cyrus, König von Babylon ("Babylonische Texte" [IV] Heft 7 [Leipzig, 1890]). |
| Darius | Strassmaier, J. N. Inschriften von Darius, König von Babylon ("Babylonische Texte" [VI] Heft 10-12 [Leipzig, 1897]). |
| $E C A B$ | Sidersky, David. Etude sur la chronologie assyro-babylonienne (Paris, 1916). |


| xii | Last of Abbreviations |
| :---: | :---: |
| $G C C I$ | Goucher College, Baltimore. Goucher College cuneiform inscriptions (New Haven, 1923-). |
| GCCI I | Dougherty, R. P. Archives from Erech, time of Nebuchadrezzar and Nabonidus (1923). |
| GCCI II | Dougherty, R. P. Archives from Erech, Neo-Babylonian and Persian periods (1933). |
| JNES | Journal of Near Eastern studies (Chicago, 1942-). |
| LCE | Keiser, C. E. Letters and contracts from Erech written in the NeoBabylonian period ("Babylonian inscriptions in the collection of James B. Nies" I [New Haven, 1918]). |
| Nabonidus | Strassmaier, J. N. Inschriften von Nabonidus, König von Babylon ("Babylonische Texte" [I, Heft 1-4] [Leipzig, 1889]). |
| Nabuchodonosor | Strassmaier, J. N. Inschriften von Nabuchodonosor, König von Babylon ("Babylonische Texte" [II, Heft 5-6] [Leipzig, 1889]). |
| $N B D$ | Moore, Ellen W. Neo-Babylonian documents in the University of Michigan collection (Ann Arbor, 1939). |
| NBLE | Clay, Albert T. Neo-Babylonian letters from Erech ("Yale oriental series. Babylonian texts" III [New Haven, 1919]). |
| NBRU | Poul, Alfred. Neubabylonische Rechtsurkunden aus den Berliner Staatlichen Museen ("Analecta Orientalia" VIII-IX [Roma, 193334]). |
| NBRVT | Krückmann, Oluf. Neubabylonische Rechts- und Verwaltungstexte ("Texte und Materialien der Frau Professor Hilprecht Collection of Babylonian Antiquities im Eigentum der Universität Jena" II/III [Leipzig, 1933]). |
| PBS | Pennsylvania. University. University Museum. Publications of the Babylonian section (Philadelphia, 1911-). |
| PBS II 1 | Clay, Albert T. Business documents of Murashu sons of Nippur dated in the reign of Darius II (1912). |
| PSBA | Society of Biblical Archaeology, London. Proceedings (London, 1878/79-1918). |
| $R A$ | Revue d'assyriologie et d'archéologie orientale (Paris, 1884-). |
| RECC | Tremayne, Arch. Records from Erech, time of Cyrus and Cambyses ("Yale oriental series. Babylonian texts" VII [1925]). |
| REN | Dougherty, R. P. Records from Erech, time of Nabonidus ("Yale oriental series. Babylonian texts" VI [1920]). |
| SSB | Kugler, Franz X. Sternkunde und Sterndienst in Babel (2 vols. and 3 supplements; Münster, 1907-35). |
| $T C L$ | Paris. Musée national du Louvre. Textes cunéiformes (Paris, 1910--). |
| TCL IX | Contenat, Georges. Contrats et lettres d'Assyrie et de Babylonie (1926). |

TCL XII-XIII Contenau, Georges. Contrats néo-babyloniens. I-II(1927-29).
UCP California. University. Publications in Semitic philology (Berkeley, 1907- ).
UCP IX 1 Lutz, H. F. Neo-Babylonian administrative documents from Erech (1927).

VAS Berlin. Königliche Museen. Vorderasiatische Abteilung. Vorderasiatische Schriftdenkmäler (Leipzig, 1907-17).
ZA Zeitschrift für Assyriologie und verwandte Gebiete (Leipzig, 1886-~).

## THE BABYLONIAN CALENDAR

In the period covered by this study the Babylonian calendar year was composed of lunar months, which began when the thin crescent of the new moon was first visible in the sky at sunset. Since the lunar year was about eleven days shorter than the solar year, it was necessary at intervals to intercalate a thirteenth month, either a second Ululu (the sixth month) or a second Addaru (the twelfth month) in order that New Year's Day, Nisanu 1, should not fall much before the spring of the year (late March and early April).

It may have been in the reign of Nabonassar, 747 b.c., that Babylonian astronomers began to recognize, as the result of centuries of observation of the heavens, that 235 lunar months have almost exactly the same number of days as nineteen solar years. This meant that seven lunar months must be intercalated over each nineteen-year period. ${ }^{1}$

The specific years in which the intercalations were to be made, however, and whether they should be second Addarus or second Ululus remained to be determined empirically-a process which lasted some centuries. This fact is evident not only from an inspection of the series of attested intercalary months, as shown in Plate I, but from three interesting letters: Clay, $N B L E$, Nos. 15, 115, and 196.

No. 115 is a royal command to Kurbanni-Marduk, an official at the temple of Eanna in Uruk, stating that there would be an intercalated Addaru in the current year 15. The name Kurbanni-Marduk and year 15 make it certain that this order was sent out by Nabunaid during his 15th year. We may assume that the same royal command went out to other temples throughout Babylonia.

[^0]No. 15 is another letter sent to administrative officials at the temple of Eanna in Uruk, this time by the officials ( $q \hat{\imath} p \bar{a} n i$ ) of Esagila, the great temple in Babylon. This letter states merely that "the month is intercalary." The Eanna official Nabu-ah-iddina functioned according to known texts from the accession year of Cyrus to the 4th year of Cambyses. We cannot fix the date of this letter more closely. It is highly interesting because it implies that in this particular case the order for the intercalary month was not sent out until presumably in the 6th or 12th month itself, the statement implying that the present Ululu or Addaru was to be followed by an intercalated Ululu or Addaru. Note also that the order was sent out not by the king, as was the previous letter, but by priestly officials at Babylon.

The third letter, No. 196, came from Zeriia, probably a priestly official at Babylon, to the same Nabu-ah-iddina and to his colleague Kina at the Uruk temple of Eanna, informing them that the month Ululu was to be intercalary. Possible dates for this letter are year 2 or 9 of Cyrus or year 3 of Cambyses.

The three letters together give the impression that orders for intercalary months were issued by the king in Chaldean Babylonia, then by the priestly officials at Babylon after Persia took over. We do not wish to stress this point. The orders transmitted to the temple officials at Uruk look very much like "form letters," and it seems reasonably certain that they were sent to temple officials throughout Babylonia. These letters also make it clear that no established system which fixed the seven intercalations at definite points within the nineteen-year period existed at the beginning of the Persian period. Letter No. 15 implies that intercalary orders were even issued within a few weeks of the beginning of an intercalary month.

In the fourth century-in 367 B.c. according to our scheme-the intercalations became standardized, and the nineteen-year cycle thus came into being. ${ }^{2}$ Jotham Johnson (Dura Studies [Philadelphia, 1932] pp. 1-15) has demonstrated that at some time between 229 b.c. and the end of the literary activity of Josephus (who died A.D. 95[?]) an additional month had been intercalated into the cycle of Greek months, changing their position relative to the months of the Babylonian calendar. A Palmyrene-Greek bilingual inscription from DuraEuropus shows that the old system was still effective in A.d. 31. ${ }^{3}$ Great significance must thus be accorded R. H. McDowell's discovery that, among the
${ }^{2}$ As we do not know for certain in just what year the standardization began, the nine-teen-year cycle may date from as early as 383 b.c. Plate I will make this clear.

[^1]vast number of coins from Seleucia, one issue of Parthian royal bronze, dated to A.D. $46 / 47$, bears month symbols based on the new correlation. ${ }^{4}$ We assume that these coins mark the introduction of the new system. ${ }^{5}$

Before 367 в.c. numerous intercalary months are known from contemporary documents. Once they have been placed in a framework of nineteen-year periods, it becomes possible to reconstruct the probable calendar. Pioneer work in collecting and tabulating intercalary months was done by Kugler and Sidersky. ${ }^{6}$ Recently discovered months permit an advance on their results, so that, by a judicious use of the known, the unknown can be approximated with a varying degree of probability from 626 to 367 b.c. The result may be seen in Plate I, where the capital letters $U$ and $A$ represent attested intercalary Ululus and Addarus respectively, the small letters unattested but probable ones. Reconstruction before 626 is much too hazardous at present and must await further additions to our knowledge.

Study of Plate I will reveal many points of interest in the working-out of the intercalary system. In the earlier periods there is a marked preference for second Ululus, perhaps going back to the time when the year began in the autumn with the month Tashritu. A gradual shift from Ululus to Addarus in later periods can be seen. When an Addaru is missed for any reason, as in 538, the year after Cyrus conquered Babylon, an Ululu is often inserted in the following year to bring the calendar up to date more quickly. Especially to be noted is the shift, in Periods 9, 10, and 16 ff ., of the month which would have been intercalated in the first year of the period to the last year of the preceding period, with the result that Periods 8 and 15 have eight intercalations each and Period 10 but six.

The goal toward which this experimentation was striving was apparently a system with the smallest limits of variability in the start of the year. Thus the limits for Nisanu 1 in Period 11 are April 26 in year 6 and March 22 in year 12, ranging over thirty-six days. April 26 was lowered to April 16 in Period 12 by shifting a second Addaru from year 5 to year 6. Similarly, March 22 of Period 11 and March 21 of Period 12 became April 20 in Period 13 by changing the second Ululu of year 12 to a second Addaru in year 11. Eventually the first actual cycle, Period 21, had as the limits for Nisanu 1 March 26 and April 21, involving only twenty-seven days.

[^2]It was stated above that observation of the crescent determined the beginning of the month. This was certainly true in the early part of the time here dealt with. It resulted now and then in a twenty-eight-day month, ${ }^{7}$ when two months of twenty-nine days came together and bad weather conditions resulted in giving thirty days to the first month. Whether for calendarial purposes calculation of the crescent ever replaced observation remains a problem whose solution must await new evidence.

## INTERCALARY MONTHS MENTIONED IN RECENTLY PUBLISHED TEXTS ${ }^{8}$

Nabopolassar
Ululu II, 7 th year
culu II, 10th year
Ululu II, 15th year
Addaru II, 20th year

Dougherty, GCCI II 74 (month name somewhat damaged but certain because of $\mathcal{Z}^{(\mathbb{x} \Delta M\rangle}$ that follows)
Ibid. No. 50
Contenau, TCL XII $19^{9}$
Dougherty, GCCI II 16; Contenau, TCL XII 21

VAS VI $265^{10}$
Lutz, UCP IX 1, Part II, No. 10
Krückmann, NBRVT, No. 197
Contenau, TCL XII 35; Moore, NBD, No. 29 (date damaged, but confirmed by Contenau reference)
Keiser, LCE, No. 126; Dougherty, GCCI I 45
Lutz, UCP IX 1, Part I, No. 52
Krückmann, NBRVT, No. 20; R. C. Thompson, Catalogue of the Late Babylonian Tablets in the Bodleian Library, Oxford (London, 1927) p. 3, A 91; p. 4, A 95
[Ululu II, 32d year] ${ }^{11}$
${ }^{7}$ See R. Campbell Thompson, The Reports of the Magicians and Astrologers of Nineveh and Babylon in the British Museum (London, 1900) II xliii.
${ }^{8}$ Italics indicate months either unknown to or not used by Kugler and Sidersky in their tables. Brackets ([ ]) indicate months rejected as impossible.
${ }^{\bullet}$ Add here the Ululu II of year 15 discussed by Kugler, SSB II 418 f . He assigned it to the 15th year of Nebuchadnezzar; but that is disproved by the Addaru II listed below for the latter's 14th year. He also suggested Nabopolassar as an alternative.
${ }^{10}$ A broken text. In lines 1 and 2 "Addaru II of year 4" is preserved. Kugler, SSB II 418, argued that on the basis of elimination this text probably belongs to Nebuchadnezzar; other possibilities were Xerxes, Artaxerxes I, Artaxerxes II, Alexander the Great, and Seleucus I. The newly discovered intercalation dated to Xerxes' 5th year practically rules his 4th year out. All eleven names in the text are good Babylonian; hence it would be difficult to assign it to a later Persian ruler. It fits perfectly into the 4th year of Nebuchadnezzar and into the general chronological system.
${ }^{11}$ Kugler, SSB II 411, uses Strassmaier, Nabuchodonosor, No. 249, as proof for an intercalated Ululu in the 32d year of Nebuchadnezzar. The text, as given by Strassmaier, is


Table Showing Positions of Babylonian Intercalary Months in Relation to Nineteen-Year Periods

Addaru II, 33d year $\quad$ Dougherty, GCCI I 117 and 125
Addaru II, 36th year

Ululu II, 41st year
Addaru II, 42d year
Nergal-shar-usur
Addaru II, acc. year
Addaru II, 3d year
Nabunaid
[Addaru II, 2d year] ${ }^{12}$
Addaru II, 3d year
Addaru II, 6th year
Ululu II, 10th year
Addaru II, 12th year

Addaru II, 15th year
Cyrus
Addaru II, 6th year
Cambyses
Ululu II, acc. year

Ululu II, 3d year
Pohl, NBRU II 8; Dougherty, REN, Nos. 13 and 46
Krückmann, NBRVT, No. 115 $19,139,212$

Dougherty, REN, No. 224 II [New Haven, 1920]) No. 130

Ibid. Nos. 68, 98, and probably 82 (year $30+x$ ); II 268 (no king given, but tablet apparently belongs here; " 36 " and "Addaru II" are clear)
Krückmann, NBRVT, Nos. 79, 153, 154; Dougherty, GCCI I 231 (year $x+11$ ), 248
Dougherty, GCCI I 138, 155, 219, 225
Krückmann, NBRVT, No. 129
Contenau, TCL XII 70

Dougherty, GCCI I 291, 305, 338, 354; idem, REN, Nos.
Moore, NBD, No. 55; Krückmann, NBRVT, No. 209 (broken date read as 11 th year by Krückmann, but must be read as 12th on basis of known materials); Dougherty, REN, Nos. 152, 165, 175, 191, 203, 206, $210,214,223,230,235$; idem, GCCI II 371 (no king's name preserved on tablet, but year 12 places it here)

Tremayne, RECC, No. 47 (year traces fit 6 but not 3 )

Tremayne, RECC, No. 98; Dougherty, GCCI II 116, 117, 118, 218; J. B. Nies and C. E. Keiser, Historical, Religious and Economic Texts and Antiquities ("Babylonian Inscriptions in the Collection of James B. Nies"

Tremayne, RECC, No. 155; Krückmann, NBRVT, No. 161 (broken date, read as " $x+1$ " by Krückmann, must be read as " 3 " on basis of known intercalated months); Contenau, TCL XIII 155
dated in lines 4 and 5 to Arahsamnu (8th month), 15th day, 32d year (the " 32 " is damaged slightly) of Nebuchadnezzar. Kugler's date is based on mention of an Ululu II at the end of the last line (line 39) unaccompanied by day, year, or king. Since lines 6, 13, 15, 31 refer to year 30 and line 37 refers to the 25th of Addaru, the Ululu II in line 39 cannot be used to prove an intercalation in year 32 . This tablet is a summary, and the various dates within the text all seem to be earlier than year 32. Hence we consider the Ululu II to be that of year 31 (see above).
${ }^{12}$ Pohl, NBRU I 20, has an Addaru II in the 2d year of Nabunaid. This is impossible, since other texts place an Addaru II in the 1st and 3d years. By addition of one wedge the year may be read either as " 3 " or as " 12 "; or by omission of one wedge it may be read as " 1 ." Error of either scribe or copyist is evident. Reading as " 3 " seems preferable to us.

Addaru II, 5th year
Darius I
Addaru II, acc. year

Ululu II, 3d year
Addaru II, 16th year

Ululu II, 19th year
Addaru II, 22d year
Addaru II, 24th year
Addaru II, 32d year
Xerxes
Ululu II, 2d year ${ }^{13}$
Addaru II, 5th year
Addaru II, 12th year

Pohl, NBRU I 77

Pohl, NBRU II 10 (Pohl's Ululu II should be corrected to read Addaru II; see A. Poebel in AJSL LVI [1939] 134, n. 41) and 11

Krückmann, NBRVT, No. 165
Contenau, TCL XIII 193; unpublished text Persepolis 4303 (on all the Persepolis references under Darius I see R. T. Hallock in JNES I [1942] 231, n. 5)

Unpublished texts Persepolis 3158 (Poebel in AJSL LV [1938] 136 f.) and 718 (Hallock)
Unpublished texts Persepolis 11424 and (slightly doubtful) 1899, 5968, and 9916 (Hallock)
Unpublished texts Persepolis 5257, 9637, and 10134 (Hallock)
Unpublished text Teheran, Iran, PT 4639 (courtesy of Dr. G. G. Cameron)

Unpublished texts Teheran, Iran, PT 4158 and PT 4745 (Cameron)
Unpublished text Teheran, Iran, PT 4996 (Cameron)
Unpublished text Oriental Institute A 23304 (Cameron)

## NOTES ON THE UNATTESTED INTERCALARY MONTHS

The references in the first column are given by period, year of period, and Julian calendar year in which Babylonian year begins. All unattested intercalary months not noted below may be regarded as highly probable.
7/IX/625 $\quad a$ is probable, $u$ possible, year very probable. All dates from $9 / 18 / 625$ to $3 / 14 / 624$ might be a month later.
7/XII/622 $u$ and year are very probable.
8/I/614 $u$ is probable, $a$ possible, year very probable. All dates from 10/16/ 614 to $4 / 11 / 613$ might be a month earlier.
8/VI/609 $\quad u$ is probable, $a$ in this or the preceding year possible. All dates from $3 / 28 / 609$ to $9 / 21 / 609$ might be a month later. All dates from $10 / 20 / 609$ to $4 / 16 / 608$ might be a month earlier.
9/III/593 $\quad u$ and year are very probable.
9/V/591 $\quad a$ and year are very probable.
9/XII/584 $u$ and year are very probable.
14/VIII/493 $\quad a$ is probable, $u$ in the following year possible. All dates from 4/23/492 to $10 / 17 / 492$ might be a month earlier.
15/XIX/463 $a$ is certain but could be in the following year. All dates from 4/22/ 462 to $4 / 11 / 461$ might be a month earlier.
$16 / \mathrm{XIX} / 444 \quad a$ is certain but could be in the following year. All dates from 4/22/443
to $4 / 11 / 442$ might be a month earlier.
${ }^{13}$ For correction of Kugler's tentative reading of year 7 (op.cit. p. 413) to year 2 see Cameron in AJSL LVIII (1941) 323, n. 40.

## KINGS' REIGNS

The general basis for the chronology of the period here treated is furnished by the Ptolemaic Canon, with help from classical sources. Cuneiform chronicles and lists of kings have also been of considerable help in checking and improving on the general framework of chronology. The numerous cuneiform economic texts often furnish an accurate check on the lengths of reigns. Since these texts cover the larger part of the period, from 626 . b.c. to the middle of the second century b.c., they are of prime importance. Dates from cuneiform astronomical texts are especially helpful for the chronology of the third and second centuries b.c.

The foundations for a study of this kind were laid by Kugler in his monumental studies Sternkunde und Sterndienst in Babel (1907-35) and Von Moses bis Paulus (1922) and by Sidersky's Etude sur la chronologie assyro-babylonienne (1916). For seventh-century chronology Streck's Assurbanipal (1916) is also essential. Important syntheses were achieved by Olmstead, "The Chaldaean dynasty," Hebrew Union College Annual II (1925) 29-55, and "Cuneiform texts and Hellenistic chronology," Classical Philology XXXII (1937) 1-14.

Recent studies which have helped to clarify Persian chronology are these:
George G. Cameron, "Darius and Xerxes in Babylonia," AJSL LVIII (1941) 314-25. Waldo H. Dubberstein, "The chronology of Cyrus and Cambyses," AJSL LV (1938) 417-19.
A. T. Olmstead, "Darius and his Behistun inscription," ibid. pp. 392-416.

Richard A. Parker, "Darius and his Egyptián campaign," AJSL LVIII 373-77.
Richard A. Parker, "Persian and Egyptian chronology," ibid. pp. 285-301.
Arno Poebel, "Chronology of Darius' first year of reign," AJSL LV 142-65 and 285314.

Arno Poebel, "The duration of the reign of Smerdis, the Magian, and the reigns of Nebuchadnezzar III and Nebuchadnezzar IV," AJSL LVI (1939) 121-45.
Arno Poebel, "The names and the order of the Old Persian and Elamite months during the Achaemenian period," AJSL LV 130-41.

The chronological difficulties connected with the period from Assur-baniapal's accession to the fall of Assyria, insofar as they touch Babylonia, and the problems of ordering Babylonian chronology from Alexander to Seleucus I have been treated in a study by Dubberstein which is to appear in JNES II (1943).


Although Kugler (SSB II 438-63), Clay (BE VIII 1, pp. 4-14), and others have given lists of kings and attempted to fix their reigns more exactly, most of such lists cover only parts of the entire period with which we are concerned. Moreover, the numerous economic texts published in the last thirty years have made it possible to improve on their efforts in certain cases by correcting their dates, especially those preceding the fourth century b.c. For the Seleucid and Arsacid periods less improvement is possible, but we have given a full list of rulers in order that our tables may be complete. ${ }^{1}$

## Nabopolassar

Evidence for End of Kandalanu's Reign
II/13/21, Sippar (J. Oppert in $Z A$ VII [1892] 341).
VIII/2/22 (Oct. 30, 626) (this date in year 22 "after" [arki; not "of"] Kandalanu is cited by Oppert in Académie des inscriptions et belles-lettres, Comptes rendus, 4. sér., XXVI [1898] 418, from a text communicated to him by T. G. Pinches; see also ibid. p. 583).
According to this last (unpublished) tablet, unless its wording means that it was written after Kandalanu's death, the accession year of Nabopolassar began between November, 626, and March, 625.
Evidence for Beginning of Nabopolassar's Reign
"After Kandalanu, in the accession year of Nabopolassar" (chronicle extract BM 86379 [published by Smith, BHT, pp. 22-26 and PI. IV] rev. 4).
II/23/1 (May 15, 625), Uruk (Pohl, NBRU II 4).
II/14/2 (May 25, 624), Babylon (VAS VI 3).

## Evidence for End of Nabopolassar's Reign

II/-/21, Sippar (J. Strassmaier in ZA IV [1889] 121 f. and 145-47, No. 19).
II/2/21 (May 12, 605), Uruk (Lutz, UCP IX 1, Part II, No. 4).
V/1/21 (Aug. 8, 605) (Moore, NBD, No. 35). ${ }^{2}$
V/1/21, kur.a.dan.šú (unpublished text, Oriental Institute A 5302).
The Strassmaier text has Nabopolassar ruling in the 2d month and Nebuchadnezzar (see below) recognized in the 4th month. In both instances the day of the month is not given. The text published by Moore and the unpublished text are clearly dated to the 5 th month. Possibly these texts are from remoter towns, where the change in kings during the 4th month had not yet been reported. If this is true, then the death of Nabopolassar occurred late in July, 605.

## Nebuchadnezzar II <br> Evidence for Beginning of Reign

IV/-/acc. (month IV ends Aug. 7, 605), Sippar (Strassmaier, loc. cit.). VII/5/acc. (Oct. 10, 605) (Strassmaier, Nabuchodonosor, No. 2).
${ }^{1}$ Wherever the city is not given in this list, it is missing on the tablet also, and the source cannot be established by other data. All dates are b.c. Missing days, months, or years are indicated by means of dashes.
${ }^{2}$ Editor gives Babylon as place of origin, but evidence to confirm this seems lacking.

Evidence for End of Reign
VI/14/43 (Sept. 25, 562), Uruk (Pohl, NBRU I 18).
VI/26/43 (Oct. 7, 562), Uruk (Contenau, TCL XII 58).
The first tablet dated to Amel-Marduk (see below) comes from Sippar(?) and is dated on the same day as the last tablet of Nebuchadnezzar from Uruk. Accordingly Nebuchadnezzar died during the first days of October, 562.

## Amel-Marduk

## Evidence for Beginning of Reign

VI/26/acc. (Oct. 7, 562), Sippar? (B. T. A. Evetts, Inscriptions of the Reigns of Evil-Merodach, Neriglissar, and Laborosoarchod ["Babylonische Texte" [III] Heft 6 B (Leipzig, 1892)] Evil-Merodach, No. 1).
VII/19/acc. (Oct. 30, 562), Babylon (ibid. No. 2).
Evidence for End of Reign
V/4/2 (July 25, 560), Babylon (ibid. No. 24).
V/17/2 (Aug. 7, 560) (Clay, BE VIII 1, No. 34).
Since the first text dated to Nergal-shar-usur was written at Babylon six days after the Clay text, the date of Amel-Marduk's death may be fixed between August 7 and August 13, 560.

## Nergal-shar-ustr

Evidence for Beginning of Reign
V/23/acc. (Aug. 13, 560), [Babylon?] (VAS. III 40).
VI/12/acc. (Sept. 1, 560), Babylon (Evetts, op. cit., Neriglissar, No. 1).
Evidence for End of Reign
I/2/4 (Apr. 12, 556), Shahrinu (ibid. Nos. 68 and 69).
Nergal-shar-usur's death occurred in late April or early May, 556.

## Labashi-Marduk

Evidence for Beginning of Reign
II/12/acc. (May 22, 556), Sippar? (Evetts, op. cit., Laborosoarchod, No. 2). II/14/acc. (May 24, 556) (ibid. No. 3).

## Evidence for End of Reign

III/9/acc. (June 17, 556) (Strassmaier in Actes du huitième Congrès international des orientalistes, tenu en 1889 à Stockholm et à Christiania, 2. partie [Leide, 1893] section sémitique [B] at end, No. 15).
III/12/acc. (June 20, 556), Sippar? (Evetts, op. cit., Laborosoarchod, No. 1).
Labashi-Marduk seems to have been recognized as king only in May and June, 556, and even then possibly not throughout Babylonia (see under Nabunaid). Berossus (frag. 14) apud Josephus Against Apion i. 20 states that Labashi-Marduk ruled nine ( ${ }^{\prime} \nu \nu{ }^{\prime} \epsilon a$ ) months. If Berossus' own manuscript used a numeral instead of the spelled-out number, confusion between $\theta$ (9) and $\beta$ (2) could easily have arisen; hence the original text may have said 2 months.

Nabunaid<br>Evidence for Beginning of Reign II/15/acc. (May 25, 556), na.su.ša.kd.na (Clay, BE VIII 1, No. 39). III/1/acc. (June 9, 556), Sippar? (VAS VI 65; see Kugler, SSB II 405-8). III/18/acc. (June 26, 556), Sippar (Strassmaier, Nabonidus, No. 1). III/23/acc. (July 1, 556), Uruk (Dougherty, REN, No. 1). III/26/acc. (July 4, 556), Sippar (Strassmaier, Nabonidus, No. 2).

These texts imply, unless they are miscopied, that Nabunaid was recognized as king by some Babylonians practically as early as was Labashi-Marduk (only three days later). Nabunaid would then according to this have been a contender for the throne almost from the death of Nergal-shar-usur. Certainly he was sole ruler of Babylonia by the close of June, 556 .

## Evidence for End of Reign

VI/3/17 to VI/28/17 (Aug. 31 to Sept. 25, 539), chiefly from Babylon and Sippar (Strassmaier, Nabonidus, Nos. 1046-52).
VI/6/17 (Sept. 3, 539), Uruk (Contenau, TCL XII 121; line 19 reads VI/6/18, but in line 1 the date is given as VI/6/17; year 18 is impossible, so we assume either a scribal error or an error by Contenau).
VII/8/17 (Oct. 5, 539), Uruk (Dougherty, REN, No. 189).
VII/17/17 (Oct. 14, 539), Uruk (Dougherty, GCCI I 390).
The Nabunaid Chronicle (last published by Smith, BHT, pp. 98-123 and Pls. XI-XIV) iii 14-18 states that Sippar fell to Persian forces VII/14/17 (Oct. 11, 539), that Babylon fell VII/16/17 (Oct. 13), and that Cyrus entered Babylon VIII/3/17 (Oct. 29). This fixes the end of Nabunaid's reign and the beginning of the reign of Cyrus. Interestingly enough, the last tablet dated to Nabunaid from Uruk is dated the day after Babylon fell to Cyrus. News of its capture had not yet reached the southern city some 125 miles distant. Strassmaier, Nabonidus, No. 1054, has the date VIII/10/17; but the month sign is shaded, and in view of known facts this date cannot be accepted. No. 1055 is dated to IX/-/17 by Strassmaier on the basis of the giving of the maššartum for the IX/-/17 of Nabunaid (lines 2-4). Since a mašsartum was often given some months in advance (see Strassmaier, Nabonidus, Nos. 219, 346, 361) this tablet is useless for exact dating purposes. This fact was recognized by Kugler, SSB II 388 f., but not by Clay, BE VIII 1, pp. 4 f.

## Cyrus

Evidence for Beginning of Reign
VII/14/acc. (Oct. 11, 539), Sippar is taken by Persian forces.
VII/16/acc. (Oct. 13), Babylon falls.
VIII/3/acc. (Oct. 29), Cyrus enters Babylon.
These dates are from the Nabunaid Chronicle (see under Nabunaid).
VII/-/acc. (not later than Oct. 26, 539) (Strassmaier, Cyrus, No. 1).
VIII/24/acc. (Nov. 19, 539) (ibid. No. 2).
X/21/acc. (Jan. 14, 538), Uruk (Tremayne, RECC, No. 1).

## Evidence for End of Reign

IV/7/9 (June 28, 530), Babylon (Strassmaier, Cyrus, No. 340).
IV/27/9 (July 18, 530), Babylon (ibid. No. 341).
V/13/9 (Aug. 2, 530), Nippur (Clay, BE VIII 1, No. 74).
V/23/9 (Aug. 12, 530), Borsippa (VAS V 42).
Coregency of Cyrus and Cambyses probably began Nisanu 1 (March 26), 530; see Kugler, $\operatorname{SSB}$ II 397-401, and Dubberstein in $A J S L$ LV (1938) 417-19. The death of Cyrus while he was fighting on the northeastern front was probably reported in Babylon in August, 530, whereupon Cambyses was recognized as sole king.

## Cambyses

Evidence for Beginning of Reign
VI/12/acc. (Aug. 31, 530), Babylon (Strassmaier, Cambyses, No. 1).
VI/16/acc. (Sept. 4, 530), Babylon (ibid. No. 2).
VI/20/acc. (Sept. 8, 530), Babylon (ibid. No. 3).
Evidence for End of Reign
I/4? and 5/8 (Mar. 30? and 31, 522), Sippar (ibid. Nos. 407 and 408).
I/12/8 (Apr. 7, 522), Uruk (Dougherty, GCCI II 106).
I/10+x/8 (Apr. 5+x, 522), Nippur (Clay, BE VIII 1, No. 71).
I/23/8 (Apr. 18, 522), Shahrinu (Strassmaier, Cambyses, No. 409).
For the period from the death of Cambyses to the $2 d$ year of Darius I consult the articles listed in the introduction to this section. Those articles are essential to an understanding of these complex years. As the evidence indicates, Cambyses was still recognized in April, 522. The Behistun inscription, § 11, seems to indicate that he did not die until after July 1, 522 (after IV/9/8). However, his successor, Bardiya, was certainly recognized in Babylonia already in months I and II (see under Bardiya).

## Bardiya (Smerdis, Gaumata)

Evidence for Beginning of Reign
XII/14/- (Mar. 11, 522), Bardiya revolts in Persia (Behistun, § 11).
1/19/1 (Apr. 14, 522), Hubadishu? (Strassmaier in ZA IV 123-25 and 148 f., No.
2).

I/-/acc. (II began Apr. 25, 522), Babylon (ibid. pp. 123 and 147 f., No. 1).
III/6/acc. (May 30, 522), Babylon (VAS IV 85).
III/23/1 (June 16, 522), Sippar (Strassmaier in ZA IV 125 f. and 149, No. 3).
IV/9/- (July 1, 522), entire empire seized by Bardiya (Behistun, § 11).
On the confusion of accession year and year 1 in this reign see Cameron in $A J S L$ LVIII (1941) 314 f .

## Evidence for End of Reign

VI/20/1 (Sept. 9, 522), Babylon (Strassmaier in ZA IV 127 f. and 151 f., No. 8). VII/1/1 (Sept. 20, 522), Babylon (ibid. pp. 128 and 152, No. 9).
VII/10/- (Sept. 29, 522), Bardiya killed by Darius (Behistun, §13).

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Nebuchadnezzar III (Nidintu-Bel)
    Evidence for Beginning of Reign
    VII?/14/- (Oct.? 3, 522), Sippar (Strassmaier, Nabuchodonosor, No. 1, gives as
        4th month; G. G. Cameron in AJSL LVIII 317 f. suggests probable emenda-
        tion to 7th).
    VII/17/- (Oct. 6, 522), Babylon (Strassmaier, Nabuchodonosor, No. 3).
    VII/20/- (Oct. 9, 522), Babylon (ibid. No. 4).
Evidence for End of Reign
    IX/7/- (Nov. 24, 522), Borsippa (Krückmann, NBRVT, No. 6).
    IX/20/- (Dec. 7, 522), Babylon (Strassmaier, Nabuchodonosor, No. 9).
    IX/21/- (Dec. 8, 522), Babylon (ibid. No. 10).
    IX/26/- (Dec. 13, 522), Darius defeats Nebuchadnezzar III at the Tigris River
        (Behistun, § 18).
    X/2/- (Dec. 18, 522), Darius defeats Nebuchadnezzar at the Euphrates River
        near Zazannu. Shortly thereafter he captures and kills Nebuchadnezzar in
        Babylon (Behistun, §§ 19 and 20).
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## Darius I

## Evidence for Beginning of Reign

X/6, 24, 25 and XI/6/acc. (Dec. 22, 522, and Jan. 9, 10, and 21, 521), Babylon
(F. H. Weissbach, Babylonische Miszellen [Leipzig, 1903] PI. 15, No. 3). These four dates are mentioned in the text, which is not dated but was probably written in month XI. Hence this text does not prove conclusively that Darius already held Babylon on December 22, 522.
XI/20/acc. (Feb. 4, 521), Sippar (Strassmaier, Darius, No. 1).
XI/25/acc. (Feb. 9, 521), Kutha (unpublished text, Oriental Institute A 729).
Darius I continued to be recognized as king in Babylonia until VI/1/1 (Sept. 8,521 ). Then came the revolt of Nebuchadnezzar IV.
Evidence for Darius' Rule in Babylonia before the Revolt of Nebuchadnezzar IV
V/17/1 (Aug. 26, 521), Sippar (Strassmaier, Darius, No. 17).
V/18/1 (Aug. 27, 521), Sippar (ibid. No. 18).
VI/1/1 (Sept. 8, 521), Sippar (ibid. No. 19).
Both Poebel in $A J S L$ LVI (1939) 135 and 138 and Cameron in $A J S L$ LVIII (1941) 318 f. accept Strassmaier, Darius, No. 20, as dating to an unknown day of month VII, year 1. Actually, the year number is damaged and might easily have been 2 or 3 . This lone tablet cannot prove that Darius held Sippar in month VII, year 1, especially since there is contradictory evidence (see under Nebuchadnezzar IV).

## Nebuchadnezzar IV (Araka)

All Tablet Evidence for Nebuchadnezzar IV
VI/2/1 (Sept. 9, 521), Uruk (Contenau, TCL XII 22).
VI/14/1 (Sept. 21, 521), Babylon (Strassmaier, Nabuchodonosor, No. 13).
VI/15/1 (Sept. 22, 521), Borsippa (Krückmann, NBRVT, No. 150).

VI/24/1 (Oct. 1, 521), Sippar (Strassmaier, Nabuchodonosor, No. 15). VII/1/1 (Oct. 8, 521), near Uruk (Contenau, TCL XII 23). VII/13/1 (Oct. 20, 521), Uruk (Keiser, LCE, No. 99). VII/16/1 (Oct. 23, 521), Babylon (Strassmaier, Nabuchodonosor, No. 17).
VII/27/1 (Nov. 3, 521), Sippar (ibid. No. 18).
VIII/22/1 (Nov. 27, 521), capture of Nebuchadnezzar IV by Persian forces (Behistun, §§ 49 and 50 ):

Cameron, loc. cit., accepts Strassmaier, Nabuchodonosor, No. 12, as evidence that Nebuchadnezzar IV had already revolted in month IV (before Aug. 10, 521) and was recognized in Babylon. The month sign and the year sign are damaged; hence this tablet's date remains uncertain. The uncertainty is increased when the list of tablets dated to Nebuchadnezzar IV (given above) is inspected. The rather closely bunched tablets begin September 9 and carry through to November 3. Between the first certain tablet and the tablet from month IV used by Cameron there is a lacuna of a full month and possibly two months.

The following interpretation is offered: After the defeat and death of Nebuchadnezzar III late in December, 522, Darius I was recognized as ruler of Babylonia until the beginning of September, 521. Early in September Nebuchadnezzar IV revolted and was recognized as king of Babylonia until late in November, 521. The army sent by Darius achieved the defeat and capture of Nebuchadnezzar on November 27, 521.

## Darius I

Evidence for Reacceptance of Darius after Defeat of Nebuchadnezzar IV IX/20/1 (Dec. 25, 521), Borsippa (Clay, BE VIII 1, No. 103). X/5/1 (Jan. 8, 520), Sippar (Strassmaier, Darius, No. 22). $\mathrm{X} / 22 / 1$ (Jan. 25, 520), Babylon (VAS IV 89).
Evidence for End of Reign
VI/13/36 (Sept. 24, 486), Dilbat (VAS III 165).
VI/19/36 (Sept. 30, 486), Dilbat (VAS V 110).
VII/27?/36 (Nov. 7?, 486), Borsippa (VAS IV 180). The day numeral is damaged and may have been 17 instead of 27 , though there seems to be space for a lost 10.
According to this evidence Darius I died in November, 486.

## Xerxes

## Evidence for Beginning of Reign

VIII/22/acc. (Dec. 1, 486), Borsippa (VAS V 117).
$\mathrm{X} / 7 /$ acc. (Jan. 14, 485) (Strassmaier in Actes ... , No. 16)
VAS VI 177, from the accession year of Xerxes, has the month sign damaged. It might be IX but more probably is XII. VAS VI 182, from Borsippa, is dated to month XI of Xerxes; day and year are broken away. In lines 7 f . there is a reference to month IX of year 36. While no king is mentioned, it is certainly Darius I, who presumably was succeeded by Xerxes in month VIII. It seems
probable that the date IX/36 given in this contract is anticipatory, in connection with the delivery of specified quantities of malt beverage. Hence it should not be used to determine the length of the reign of Darius $I$.

Bel-shimannt, Shamash-eriba
Cameron in $A J S L$ LVIII 319-25 has shown the probability that the revolts of Bel-shimanni and Shamash-eriba fall into the 4th year of Xerxes' reign. The revolts were of short duration but apparently brought about a change in royal titulary on Babylonian tablets and possibly the destruction of Babylon. The evidence for the length of the reign of each of these two kings has been presented by Cameron. Here it is merely abstracted and assigned to the 4th year.

Tablet evidence for the rule of Bel-shimanni includes only the period from V/10?/acc. (Aug. 8?, 482) to VI/1/acc. (Aug. 29, 482).

Tablet evidence for the rule of Shamash-eriba includes the period from VI/25/acc. (Sept. 22, 482) to VII/23/acc. (Oct. 20, 482).

## Xerxes

Evidence for End of Reign
VI/10/16 (Sept. 24, 470), Bîtu eš-šúu (suburb of Borsippa) (VAS III 184).
X-XII/-/20 (XII ends Mar. 24, 465), Persepolis (unpublished text, Oriental Institute A 23253 [courtesy of Professor Cameron]).

There are no known cuneiform texts dated to year 21. However, Papyrus No. 6 (A. Cowley, Aramaic Papyri of the Fifth Century B.C. [Oxford, 1923]) is dated IX/18, "year 21, the accession year of Artaxerxes" (Jan. 3, 464), Assuan, Egypt. This makes it certain that Xerxes had died and been succeeded by Artaxerxes before the end of 465 .

## Artaxerxes I

## Evidence for Beginning of Reign

III/-/1 (III begins June 12, 464), Persepolis (unpublished text, Teheran, Iran, PT 4441 [Cameron]).
I-IV/-/1 (IV ends Aug. 9, 464), Persepolis (unpublished text, Oriental Institute A 23324 [Cameron]).
VII/4/1 (Oct. 12, 464), Nippur (Krückmann, NBRVT, No. 142).
VII/5/1 (Oct. 13, 464), Borsippa (Clay, BE VIII 1, No. 121).
Evidence for End of Reign
LX/12/41 (Dec. 24, 424), Nippur (Clay, BE IX 108).
XI/17/41 (Feb. 26, 423), tar-ba-a-a (Clay, $B E$ IX 109).
Clay in $B E$ X, page 2, suggests that the last date may incorporate a scribal error, in view of the evidence for the beginning of the reign of Darius II given below. It is also possible that news of the change in rulers had not yet reached the little village near Nippur. Clay (loc. cit.) refers also to an unpublished text, C.B.M. 5310, dated to Artaxerxes, XI/3/41. However, a tablet bearing the number C.B.S. 5310 (presumably the same text) was published by Clay himself a few
years later (PBS II 1, No. 17). Its date is clearly XI/3/1, Darius. Since there seems to be some confusion, the date from the unpublished text cannot be used.

There is no evidence in cuneiform tablets accepted as contemporary that Xerxes II was ever acknowledged as king in Babylonia. Artaxerxes I was recognized as king until the end of December, 424, and possibly even as late as the following February. Certainly Darius II was king, and tablets were dated to him, by the middle of February, 423.

## Darius II

Evidence for Beginning of Reign
XI/4/acc. (Feb. 13, 423), Babylon (Clay, BE X 1 [republished by Krückmann, NBRVT, No. 29]).
XI/15/acc. (Feb. 24, 423), Nippur (Clay, BE X 2 and 3).
XII/17/ace. (Mar. 28, 423), Nippur (Clay, BE X 5).
Two tablets have unusual date formulas. Clay, $B E$ X 4 (republished by Krückmann, NBRVT, No. 216), and Clay, BE VIII 1, No. 127, are dated "41st year, accession year, 12th month" (latter text wrongly " 51 st year"), the 14th and 20th days respectively of "Darius, king of lands." An obvious interpretation is that the scribes began to write the accustomed " 41 " and then, remembering that a new king was ruling, merely added "accession year" and continued correctly with the rest of the date formula.

## Evidence for End of Reign

II?/29/13 (May? 25, 411), Nippur (Clay, BE X 132).
XI/24/13 (Feb. 10, 410), Assuan, Egypt (Cowley, op. cit. No. 28).
There is no evidence from contemporary business documents for the years 14 to 19 of Darius II, nor are there dated tablets from the accession year of Artaxerxes II. Artaxerxes II was recognized as king before April, 404.

The lengths of the kings' reigns from here on are established chiefly by use of the well known Ptolemaic Canon, of the Saros Tablet (Strassmaier in ZA VII [1892] 198-201 and in ZA VIII [1893] 106-8; Kugler, SSB II 363-66), and of the valuable Saros Canon (Joseph Epping and Strassmaier in ZA VIII 149-78 and Strassmaier in ZA X [1895] 64-69; photographs and a new transliteration were made available through the courtesy of Professor Otto Neugebauer). Additional chronological information from cuneiform texts as well as from Greek sources was quoted and used by Kugler, SSB II 362-438. It has not been thought necessary to repeat evidence of a general character for the lengths of reigns. Our conversion tables indicate the years assigned to the several rulers on the basis of the materials listed above.

## Artaxerxes II

Evidence for Beginning of Reign
VII/28/1 (Oct. 31, 404), Nippur (Clay, BE IX 1).
Evidence for End of Reign
VIII/10/46 (Nov. 24, 359), Babylon (VAS VI 186; the year numeral is damaged slightly but was read as " 46 ", by Arthur Ungnad).

Artaxerxes II died and was succeeded by Artaxerxes III between late November, 359, and April, 358.

## Artaxerxes III

Accession date indicated by evidence given under Artaxerxas II. No contemporary cuneiform documents help to establish his twenty-one years of rule, which ended in 338/37.

## Arses

No contemporary evidence is available for his rule of two years (338/37 to 336/ 35). He is recognized in the lists referred to under Darius II.

## Darius III

No certain contemporary evidence for his rule of five years. See references under Darius II. The Ptolemaic Canon gives Darius III a four-year rule in Egypt. Cuneiform evidence gives Darius III five years in Babylonia.

## Alexander the Great

Alexander was recognized in Egypt probably shortly after his invasion, late in 332. He was recognized in Babylon after Gaugamela in October, 331. Cuneiform evidence for the period of Alexander is confused, since two systems of dating were used. One system reckoned year 1 of Alexander as beginning April 3, 330; the other counted from his Macedonian accession, with year 1 as 336 , since Macedonian vsage did not have an "accession year." The few dated business tablets ${ }^{3}$ are not decisive in determining contemporary practice.

## Philip Arrhidaeus

Recognized as king after Alexander's death, in the summer of 323. The Saros Canon and the Diadochi Chronicle (published by Smith, BHT, pp. 124-49 and Pls. XV-XVII) both count 323 as his year 1. The Diadochi Chronicle records events up to and including his 8 th year (316). This dating is borne out by the business documents. The last document dated to Philip is of V/20/8 (Aug. 13, 316), Uruk (Contenau, TCL XIII 249). The Saros Canon, which is not contemporary, recognizes Antigonus as ruling in 317. The Saros Tablet, likewise not contemporary, apparently has the rule of Antigonus beginning in 316. Since Antigonus is never given the title of "king" in contemporary documents but is always called rab uqu/a ("general"), he should not be placed in the list of official kings. See on Philip and
${ }^{3}$ Three listed by Krückmann, BRVU, p. 20. But Olmstead in Classical Philology XXXII (1937) 4 says: "We have no published cuneiform records from Alexander the Great; those formerly so attributed come from the reign of his son of the same name." See too Dubberstein's article to appear in JNES II (1943). See also the references under Darius II. Alexander's death probably occurred on the 1st of Simanu (June 13), 323. With Alexander the well known device of the "accession year" disappears from Babylonian usage, and the part of the regnal year remaining after the death of the previous ruler is reckoned as "year 1 " of his successor.
his successors Krückmann, BRVU, pp. 20 f.; T. G. Pinches in PSBA VI (1883/84) 204; Sidney Smith in RA XXII (1925) 179-97; and the forthcoming article by Dubberstein in JNES II.

Alexander (II), son of Alexander
Recognized as the successor of Philip in 316, which was year 8 for Philip and automatically became Alexander's year 1, even though Antigonus remained the recognized authority behind the king. The Diadochi Chronicle makes it certain that Alexander was the official king up to his 9th year (308), and Pinches in PSBA VI 204 refers to the existence of dated documents of his 10th year (307/6). This dating is valid despite the Greek evidence, which indicates that Alexander and his mother were murdered probably in 310/9. Apparently the fiction of kingship was carried on after the death of the young Alexander.

## Seleucus I Nicator

In Syria Seleucus I began his official reign in the autumn of 312, shortly after he had taken Babylon. In Babylonia the fiction of the royal house of Macedonia continued as above indicated until some time in $307 / 6$, possibly even later. However, when documents were dated to Seleucus I (earliest published text I/3/8 [Apr. 16, 304], $C T$ IV [29 d]) in Babylonia, the first year of the king was officially reckoned as having begun on New Year's Day, April 3, 311, a few months after Seleucus had conquered Babylon.
The official dating in Babylonia successively to Darius III, Alexander, Philip Arrhidaeus, Alexander (II), son of Alexander, and Seleucus I closely resembles the pattern found in Egypt, where dating was carried on in the name of the dead Alexander, son of Alexander, as late as the beginning of 304. Beginning in 304, Ptolemy, who, like Seleucus, had held actual rule for some years previously, began dating in his own right also. ${ }^{4}$ This very close parallel helps measurably to establish the sequence as set forth above.

## Selfucid Era

Beginning with Seleucus I the Babylonian scribe, who still wrote cuneiform, made one further innovation. He now not only had no "accession years," but he dated continuously after 311, according to the era of Seleucus. ${ }^{5}$ The beginnings and ends of reigns cannot always be determined with the exactitude which was possible in the earlier periods. However, the nineteen-year cycle had long been fixed, and there is no difficulty in establishing the calendar or in translating Seleucid or Arsacid dates into Julian dates.

With few exceptions all known economic texts have been listed by Krückmann, $B R V U, \mathrm{pp} .20-23$. Kugler in his extensive $S S B$ has covered most of the chronological material which can be extracted from the astronomical texts. Olmstead in Classical Philology XXXII (1937) 1-14; N. C. Debevoise, A Political History of
${ }^{4}$ For the Egyptian evidence see T. C. Skeat in Mizraim VI (1937) 7-40.
${ }^{5}$ In the Macedonian calendar the Seleucid era began with Dios 1 (Oct. 7), 312 b.c.; in the Babylonian it began with Nisanu 1 (Apr. 3), 311 в.c.

Parthia (Chicago, 1938); and Kugler, SSB II 438-63 and Von Moses bis Paulus (Münster, 1922) pp. 309-44, have combined and ordered our knowledge of the chronology of this period.

Using the cuneiform evidence presented in these studies, we offer this summary of the beginnings and ends of the reigns of Seleucid rulers. Where references for earliest and latest dates are already given in Kugler, Von Moses bis Paulus, or in Krückmann, BRVU, merely the author's name is indicated. New references are given in full.

Seleucus I
Latest Date XII/2/19 (Mar. 5, 292) (Kugler).

Seleucus I and Antiochus I Soter
Earliest Date IX/20/20 (Dec. 13, 292) (Kugler).
Latest Date IX/10/31 (Dec. 2, 281) (Kugler).

Antiochus I and Seleucus
Earliest Date Year 32, no month, no day (Apr. 19, 280-Apr. 7, 279) (Kugler).
Latest Date XII/20/43 (Mar. 27, 268) (Kugler).

Antlochus I and Antiochus II Theos
Earliest Date XIIb/21/45? (Apr. 5, 266?) (Clay, BRLM II, No. 11 and p. 84).

Krückmann follows Clay, who read the year as $46(?)$. Since the month is intercalated the year $(44+x)$ must be read either as 45 or as 47 . The spacing of the wedges seems to make year 45 preferable.
Latest Date XII/18/50 (Mar. 8, 261) (Krückmann).

Antiochus II Theos
Earliest Date VII/17/51 (Oct. 29, 261) (Krückmann).
Latest Date I/12/66 (Apr. 15, 246) (Krückmann).

Seleucus II Callinicus, Seleucus III Soter
Earliest Date
III/22/67 (July 11, 245) (Krückmann).

## Latest Date

III/24/89 (July 10, 223) (Kugler).
These two rulers cannot be distinguished in cuneiform sources because of their identical names and their successive rules.

## Antiochus III (the Great)

## Earliest Date

IX/21/90 (Dec. 21, 222) (Krückmann, with XI misprinted for IX; see J. Oppert and J. Ménant, Documents juridiques de l'Assyrie et de la Chaldée [Paris, 1877] p. 314).

## Latest Date

V/17/102 (Aug. 9, 210) (Krückmann).
Krückmann, BRVU, p.22, reads Louis Speleers, Recueil des inscriptions de $l^{\prime}$ Asie Antérieure des Musées Royaux du Cinquantenaire à Bruxelles (Bruxelies, 1925) No. 293, as $1 / 2 / 104$. The year had best be read on the basis of Speleers' bad copy (me me $1^{\text {巨am }}$ ) as 101. See also under the following heading.
Anriochus III and Antiochus
Earliest Date
Year 104 (Apr. 3, 208-Apr. 21, 207) (see Olmstead in Classical Philology XXXII 9 f.).
Latest Date
X/21/119 (Jan. 28, 192) (Krückmann).

## Antiochus III

Earliest Date
I/1/120 (Apr. 6, 192) (Kugler).
Latest Date
Year 124, no month, no day (Apr. 22-July 17 or 7, 188) (Kugler; see below).
Anttochus III and Seleucus IV Philopator
Earliest Date
III/28 or 18/124 (July 17 or 7,188 ) (Kugler).
Latest Date
I/25/125 (May 6, 187) (Kugler).
Seleucus IV Philopator
Earliest Date
IV/11/125 (July 19, 187) (Kugler).
Latest Date
Year [136], no month, no day (Apr. 10, 176-Mar. 29, 175) (Kugler).
Antiochus IV Epiphanes
Only Date ${ }^{6}$
XII/10/137 (Feb. 27, 174) (unpublished Oriental Institute tablet A 2518).
"Krückmann gives as what would be an "earliest date" V?/14/136 (Aug.? 19, 176), based on Speleers, op. cit. Nos. 298 and 300. But Speleers' copy reads in both cases not ' 136 " but " 96. ." Hence the date concerned really belongs to Antiochus III, not IV.

Antiochus IV and Antiochus
Earliest Date
138, the whole year (beginning Apr. 18, 174) (Kugler).
Latest Date XI/21/143 (Mar. 3, 168) (Krückmann).

Antiochus IV, Antiochus V Eupator
Earliest Date
III/25/144 (July 3, 168) (Krückmann).
Latest Date VII/18/150 (Oct. 17, 162) (Kugler).

Again because of similarity of names it is impossible to divide the reigns of these two kings, who ruled successively.

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Demetrius I Soter
Earliest Date II/22/[151] (May 14, 161) (Kugler).
Latest Date —/3/161 (Apr. 6, 151-Mar. 26, 150) (Krückmann).
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Alexander I Balas
Earliest Date VII/5/162 (Oct. 21, 150) (Kugler).
Latest Date VIII/20/166 (Nov. 21, 146) (Kugler).

The remaining Seleucid kings and the Parthian kings are given in tabular form only. The known cuneiform data, which may be found in Kugler and Krückmann, are of little utility for chronological purposes. We follow the table in Debevoise, op. cit. pp. 270 f.

## SELEUCID KINGS

| Demetrius II Nicator | в.c. |  | в. |
| :---: | :---: | :---: | :---: |
|  | \{ 145-139/38 | Antiochus X Eusebes Philopator |  |
|  | 129-125 |  | 95-83 |
| Antiochus VI Epiphanes | 145-142/41 | Demetrius III Eucaerus Phi |  |
| Antiochus VII Sidetes | 139/38-129 | pator Soter | 95-88 |
| Alexander II Zabinas | 128-123 | Antrochus XI Philadelphus | 92 |
| Antiochus VIII Grypus and |  | Philippus I Philadelphus | 92-83 |
| Cleopatra Thea | 125-121 | Antiochus XII Dionysus | 87-84 |
| Seleucus V | 125 | Tigranes of Armenia | 83-69 |
| Antiochus VIII Grypus | 121-96 | Antiochus XIII Astaticus | 69-64 |
| Antiochus IX Cyzicenus | 115-95 | Philippus II | 65-64 |
| Seleucus VI Epiphanes Nicator |  |  |  |

## PARTHIAN KINGS

## B.c.

Arsaces
Tiridates I
Artabanus I
Priapatius Prraatras I
Mithradates I
Phraates II
Artabanus II
Mithradates II
Gotarzes I
Orones I
Sinatruces
Phraates III
Mithradates III
Orodes II
Pacorus I
Phrategs IV
Tiridates II
ca. 250-248
ca. 248-211
ca. 211-191
ca. 191-176
ca. 176-171
ca. 171-138/37
138/37-ca. 128
ca. 128-124/23
ca. 123-88/87
91-81/80
80-76/75
76/75-70 or 69
70 or $69-58 / 57$
58/57-55
ca. 57-37/36
died in 38
ca. 38-2
ca. 30-25
Phraataces (Phraates V) 2 b.c.-a.d. 4
Orodes III
A.D. 4-ca. 6/7

Vonones I
Artabanus III
Tiridates III
Cinnamus
Gotarzes II
Vardanes
Vonones II
Vologases I
Pacorus II
Artabanus IV
Osroes
Parthamaspates
Vologases II
Mithradates IV
Vologases III
Vologases IV
Vologases $V$
Artabanus V
Artavasdes
A.D. 7/8-12
12-ca. 38
ca. 36
ca. 37
ca. 38-51
ca. 39-47/48
ca. 51
51/52-79/80
78-115/16?
80-81
ca. 109/10-128/29
ca. 117
105/6? - 147
128/29?-147?
148-192
191-207/8
207/8-222/23
ca. 213-227
ca. 227-228/29?

## III

## TABLES FOR THE RESTATEMENT OF BABYLONIAN DATES IN TERMS OF THE JULIAN CALENDAR

These tables have been built on dates for Nisanu 1 from 626 в.c. to A.d. 46 calculated by the new-moon tables of Karl Schoch in S. Langdon and J. K. Fotheringham, The Venus Tablets of Ammizaduga (London, 1928). The results of Sidersky (RA XXX [1933] 57-70) were incorporated, with some corrections. The dates of Nisanu were then applied to Schoch's calendarial Table M. When the calculated date agreed with the one obtained from this table in the year under consideration and in the following year, Table M was used to derive the first days of the other months. When there was disagreement between the calculated dates for Nisanu 1 and the dates derived from Table M, the new-moon dates were calculated forward and backward from Nisanu 1 until agreement was reached between the calculated dates and the dates derived from Table M. At no time, it should be noted, were the calculated date and the derived date in disagreement by more than one day. Numerous spot'tests for accuracy have been made throughout the tables, and every sequence of three or four thirty-day months and of three twenty-nineday months has been checked by calculation. ${ }^{1}$

Accuracy of the tables.-Schoch claimed for his Table M an accuracy of about 75 per cent (op. cit. p. 101) in the dating of beginnings of months, but was less certain as to identification of the months themselves. This figure is not borne out; for, after adjusting his Table M in accordance with the intercalations given in our Plate I, we find his dates for the beginnings of years to be but 61.5 per cent accurate. Enough dates were calculated in the preparation of our tables, however, to raise the percentage of their over-all correctness to 70 per cent. This means that 70 per cent of all the dates in our tables are astronomically correct to the day, while the remaining 30 per cent may be off by one day. Since the tables are purely for historical purposes, this uncertainty is unimportant. It should be noted that the percentage of uncertainty is slightly greater for biblical dates given in the Babylonian calendar, since the new moon was visible at Jerusalem thirty-seven minutes before it was visible

[^3]at Babylon and therefore upon occasion the new month could begin a day earlier at Jerusalem. Our tables are accurate as stated for sites in Babylonia between $31.5^{\circ}$ and $33.5^{\circ}$ in latitude and tend to grow slightly less exact as these limits are exceeded (cf. Schoch, op. cit. p. 94). Ancient errors of observation are, of course, also possible. The degrees of uncertainty of the unattested intercalary months (shown in italics) may be ascertained by checking Plate I and its accompanying notes.

Use of the tables.-The dates as given are civil days, from midnight to midnight, although in actual practice the Babylonian day began in each case with the preceding sunset. The dates given are those of the first day of each month. Leap years are indicated by italicizing the last figure of the year when it is first given, e.g. 625. The accession year of every king is shown as the last year of his predecessor. In the interest of economy of space, months are designated here not by Roman numerals, as used elsewhere in this work, but by Arabic numerals; thus 4/5 is April 5.

The arrangement in the tables is that of the Babylonian calendar, which began in the spring. The Macedonian calendar, however, began in the fall, six months earlier. Hence it must be borne in mind that each year of the Macedonian Seleucid era overlapped two Babylonian years, the second of which bore the same number as the Macedonian year.

The month names of the calendars used at various times in this period up to A.D. $46 / 47$ are to be correlated with the Babylonian names as follows: ${ }^{2}$

| Babriontan | Hebrew | maceionian | Old Prrbian | Achamemid Elamita |
| :---: | :---: | :---: | :---: | :---: |
| Nisanu | Nisan | Artemisios | Adukanish | Hadukannash |
| Aiaru | Iyyar | Daisios | Thuravahara | Turmar |
| Simanu | Sivan | Panemos | Thaigarchish | Sakurrisish |
| Duzu | Tammuz | Loös | Garmapada | Karmabadash |
| Abu | Ab | Gorpiaios |  | Turnabasish |
| Ululu | Elul | Hyperberetaios |  | Qarbashiyash |
| Tashritu | Tishri | Dios | Bagayadish | Bagiyatish |
| Arahsamnu | Heshvan | Apellaios |  | Marqashanash |
| Kislimu | Kislev | Audynaios | Açiyadiya | Hashiyatish |
| Tebetu | Tebeth | Peritios | Anamaka | Hanamakash |
| Shabatu | Shebat | Dystros |  | Samimash |
| Addaru | Adar | Xanthikos | Viyakhna | Mikannash |

In the tables the Babylonian month names, abbreviated to their first three letters, are used.

[^4]
## NABOPOLASSAR



|  | $\mathrm{Y}_{\text {miA. }}^{\text {b.c. }}$ | Nis | Aia | Snm | Duz | Abu | Uuv | UII | TAs | Ara | Kı |  | T |  |  | A | AII |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1594 | 4/12 | 5/11 | 6/9 | 7/9 | 8/7 | 9/6 |  | 10/5 | 11/4 | 12/4 | 593 | $1 / 2$ |  |  |  |  |
| 12 | 253 | 3/31 | 4/30 | 5/29 | 6/27 | 7/27 | 8/25 | 9/24 | 10/23 | 11/22 | 12/21 | 1592 | 1/20 |  | 2/19 | $3 / 2$ |  |
| 13 | 59 | 4/19 | 5/19 | 6/17 | 7/17 | 8/15 | 9/13 |  | 10/13 | 11 | 12 | 591 | 1/9 |  | 2/8 |  |  |
|  | 5 | 4/8 | 5/7 | 6/6 | 7/5 |  | 9/3 |  | 10/2 | 11/1 | 11/30 |  | 12/30 |  | 1/28 |  | 9/28 |
| 15 | 590 | 4/27 | 5/26 | 6/25 | 7/24 | 8/23 | 9/21 |  | 10/21 | 11/19 | 12/19 | 9589 | 1/17 |  | 2/16 | 3/ |  |
| 16 | 589 | 4/15 | ) | 6/13 | 7/13 | 8/11 | 9/10 |  | 10/9 | 11/8 | 12/7 | 588 | 1/6 |  | 2/4 | 3/6 |  |
| 17 | 588 | 4/4 | 5/4 | 6/2 | 7/2 | 8/1 | 8/30 |  | 9/29 | 10/29 | 11/27 |  | 12/26 |  | 1/25 | 2/2 | 3/25 |
| 18 | 587 | 4/23 | 5/23 | 6/21 | 7/21 | 8/20 | 9/18 |  | 10/18 | 11/16 | 12/16 | 6586 | 1/14 |  | 2/13 | 3/ |  |
| 19 | 586 | 4/13 | 5/12 | 6/11 | 7/11 | 8/9 | 9/8 |  | 10/7 | 11/6 | 12/5 | 585 | 1/4 |  | 2/3 | $3 / 3$ |  |
| 20 | 585 | 4/2 | 5/1 | 5/30 | 6/29 | 7/28 | 8/26 |  | 9/25 | 10/25 | 11/24 |  | 12/23 |  | 1/22 | 2/21 |  |
| 21 | 584 | 3/22 | 4/21 | 5/20 | 6/18 | 7/18 | 8/16 | 9/14 | 10/14 | 11/13 | 12/1 | 583 | 1/11 |  | 2/9 | 3/ |  |
| 22 | 583 | 4/10 | 5/9 | 6/7 | 7/7 | 8/5 | 9/4 |  | 10/4 | 11/2 | 12/2 |  | 12/31 |  | 1/30 | 2/28 |  |
| 23 | 582 | 3/30 | 4/29 | 5/28 | 6/26 | 7/26 | 8/24 |  | 9/23 | 10/22 | 11/21 |  | 12/21 |  | 1/19 | 2/18 | 3/19 |
| 24 | 581 | 4/17 | 5/16 | 6/15 | 7/15 | 8/13 | 9/12 |  | 10/11 | 11/9 | 12/9 | 580 | 1/7 |  | 2/6 | 3/7 |  |
| 25 | 580 | 4/6 | 5/5 | 6/4 | 7/4 | 8/2 | 9/1 |  | $9 / 30$ | 10/30 | 11/28 |  | 12/28 |  | 1/26 | 2/2 |  |
| 26 | 57 | 3/26 | 4/25 | 5/2 | 6/23 | 7/22 | 8/21 |  | 9/20 | 10/19 | 11/18 |  | 12/17 |  | 1/15 |  | 3/15 |
| 27 | 578 | 4/14 | 5/13 | 6/12 | 7/12 | 8/10 | 9/9 |  | 10/9 | 11/7 | 12/7 | 577 | 1/6 |  | 2/4 | 3/5 |  |
| 28 | 577 | 4/3 | 5/2 | 6/1 | 6/30 | $7 / 30$ | 8/28 |  | 9/27 | 10/26 | 11/25 |  | 12/25 |  | 1/23 | 2/21 | /23 |
| 29 | 576 | 4/22 | 5/21 | 6/19 | 7/19 | 8/18 | 9/16 |  | 10/16 | 11/14 | 12/14 | 575 | 1/13 |  | 2/11 | 3/13 |  |
| 30 | 57 | 4/12 | 5/11 | 6/9 | 7/9 | 8/7 | 9/6 |  | 10/5 | 11/4 | 12/3 | 574 | 1/2 |  | 1/31 | $3 / 2$ |  |
| 31 | 574 | 4/1 | 4/30 | 5/29 | 6/28 | 7/27 | 8/26 | 9/24 | 10/24 | 11/22 | 12/22 | 573 | $1 / 20$ |  | 2/19 | $3 / 20$ |  |
| 32 | 573 | 4/19 | 5/18 | 6/17 | 7/16 | 8/14 | 9/13 |  | 10/12 | 11/11 | 12/10 | 572 | 1/9 |  | 2/7 | 3/9 |  |
| 33 | 572 | 4/8 | 5/7 | 6/5 | 7/5 | 8/4 | 9/2 |  | 10/2 | 10/31 | 11/30 |  | 12/29 | 571 | 1/28 | 2/26 | 3/28 |
| 34 | 571 | 4/26 | 5/26 | 6/24 | 7/24 | 8/23 | 9/21 |  | 10/21 | 11/19 | 12/19 | 570 | 1/18 |  | 2/16 | 3/17 |  |
| 35 | 570 | 4/16 | 5/15 | 6/14 | 7/13 | 8/1 | 9/11 |  | 10/10 | 11/9 | 12/8 | 569 | 1/6 |  | 2/5 | 3/5 |  |
| 365 | 569 | 4/4 | 5/3 | 6/2 | 7/2 | 7/31 | 8/30 |  | 9/28 | 10/28 | 11/26 |  | 12/26 | 568 | 1/24 | 2/23 | /24 |
| 375 | 568 | 4/23 | 5/22 | 6/21 | 7/21 | 8/19 | 9/18 |  | 10/17 | 11/16 | 12/16 | 567 | 1/15 |  | 2/13 | $3 / 15$ |  |
| 385 | 567 | 4/13 | 5/12 | 6/11 | 7/10 | 8/9 | 9/7 |  | 10/7 | 11/5 | 12/5 | 566 | 1/3 |  | 2/1 | $3 / 3$ |  |
| 395 | 566 | 4/2 | $5 / 1$ | 5/31 | 6/29 | 7/29 | $8 / 27$ |  | 9/26 | 10/26 | 11/24 |  | 12/24 | 565 | 1/22 | 2/21 |  |
| 405 | 565 | 3/22 | 4/20 | 5/20 | 6/18 | 7/17 | 8/16 |  | 9/14 | 10/14 | 11/13 |  | 12/12 |  | /10 | 2/9 |  |
| 415 | 564 | 3/11 | 4/9 | 5/8 | 6/7 | 7/6 | 8/5 | 9/4 | 10/3 | 11/2 | 12/1 |  | 12/31 | 563 | 1/29 | 2/28 |  |
|  | 563 | 3/29 | 4/28 | 5/27 | 6/26 | 7/26 | 8/24 |  | 9/23 | 10/22 | 11/21 |  | 12/20 | 562 | 1/18 | 2/17 | 3/19 |
|  | 562 | 4/17 | 5/17 | 6/15 | 7/15 | 8/13 | 9/12 |  | 10/12 | 11/10 | 12/10 | 561 | 1/8 |  | 2/7 | 3/7 |  |

## AMEL-MARDUK

$\begin{array}{lllllll}1 & 561 & 4 / 6 & 5 / 5 & 6 / 3 & 7 / 3 & 8 / 2\end{array} 8 / 31$
2560 3/26 4/24 5/24 6/22 7/22 8/21

9/30 10/29 11/28
9/19 10/19 11/17

12/27 $5601 / 26 \quad 2 / 24$
12/17 $5591 / 15 \quad 2 / 143 / 15$

## NERGAL-SHAR-USUR

|  | $\mathrm{Y}_{\mathbf{E A R}}^{\text {B.c. }}$ | Nis | Ain | Sim | Duz | Abu | Ulo | U II | TAs | Ara | Kis |  | Teb |  | SHA | Add | A II |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 559 | 4/14 | 5/13 | 6/12 | 7/11 | 8/10 | 9/9 |  | 10/8 | 11/7 | 12/7 | 558 | 1/5 |  | 2/3 | $3 / 5$ |  |
| 2 | 558 | 4/4 | $5 / 3$ | $6 / 1$ | 7/1 | 7/30 | 8/29 |  | 9/28 | 10/27 | 11/26 |  | 12/25 | 557 | 1/24 | 2/23 |  |
| 3 | 557 | $3 / 23$ | 4/22 | 5/21 | 6/20 | 7/19 | 8/17 |  | 9/16 | 10/15 | 11/14 |  | 12/13 | 556 | 1/12 | 2/11 | /12 |
| 4 | 556 | 4/11 | 5/11 | 6/9 | 7/9 | 8/7 | 9/5 |  | 10/5 | 11/3 | 12/3 | 555 | 1/1 |  | 1/31 | $3 / 1$ |  |

Labashi-Marduk=year 4 of Nergal-shar-usur
NABUNAID
$\begin{array}{lllllll}1 & 555 & 3 / 31 & 4 / 30 & 5 / 30 & 6 / 28 & 7 / 27 \\ 8 / 26\end{array}$
$25544 / 19 \quad 5 / 19 \quad 6 / 17 \quad 7 / 17 \quad 8 / 15 \quad 9 / 14$ $\begin{array}{lllllll}3 & 553 & 4 / 7 & 5 / 7 & 6 / 5 & 7 / 5 & 8 / 3\end{array} \quad 9 / 2$ 4 552 $4 / 26 \quad 5 / 25 \quad 6 / 24 \quad 7 / 248 / 229 / 21$
 $\begin{array}{lllllll}6 & 550 & 4 / 5 & 5 / 4 & 6 / 3 & 7 / 2 & 8 / 1\end{array} \quad 8 / 30$ $7 \quad 5494 / 23 \quad 5 / 23 \quad 6 / 21 \cdot 7 / 20 \quad 8 / 19 \quad 9 / 17$ $\begin{array}{lllllllllll} & 5 & 548 & 4 / 13 & 5 / 12 & 6 / 10 & 7 / 10 & 8 / 8 & 9 / 7\end{array}$ $\begin{array}{lllllll}9 & 547 & 4 / 2 & 5 / 2 & 5 / 31 & 6 / 29 & 7 / 29\end{array} 8 / 27$ $10 \quad 546 \quad 3 / 22 \quad 4 / 20 \quad 5 / 20 \quad 6 / 19 \quad 7 / 18 \quad 8 / 17$
$125443 / 294 / 285 / 27 \quad 6 / 26 \quad 7 / 25 \quad 8 / 24$ $\begin{array}{llllllllll}13 & 543 & 4 / 17 & 5 / 16 & 6 / 15 & 7 / 14 & 8 / 13 & 9 / 12\end{array}$ $\begin{array}{lllllll}14 & 542 & 4 / 6 & 5 / 6 & 6 / 4 & 7 / 4 & 8 / 3\end{array} \quad 9 / 1$ $15 \begin{array}{lllllllll} & 541 & 3 / 26 & 4 / 24 & 5 / 24 & 6 / 22 & 7 / 22 & 8 / 20\end{array}$ $\begin{array}{lllllllll}16 & 540 & 4 / 14 & 5 / 13 & 6 / 12 & 7 / 11 & 8 / 10 & 9 / 9\end{array}$ $\begin{array}{lllllll}17 & 539 & 4 / 4 & 5 / 3 & 6 / 1 & 7 / 1 & 7 / 30\end{array} 8 / 29$
$\begin{array}{llllllllllllllllll}9 / 24 & 10 / 24 & 11 / 22 & 12 / 22 & 554 & 1 / 20 & 2 / 19 & 3 / 20\end{array}$
$\begin{array}{lllllll}10 / 14 & 11 / 12 & 12 / 11 & 553 & 1 / 10 & 2 / 8 & 3 / 8\end{array}$
$\begin{array}{lllllllllll}10 / 2 & 10 / 31 & 11 / 29 & 12 / 29 & 552 & 1 / 27 & 2 / 26 & 3 / 27\end{array}$
$\begin{array}{llllllll}10 / 21 & 11 / 19 & 12 / 18 & 551 & 1 / 17 & 2 / 15 & 3 / 17\end{array}$
$\begin{array}{lllllll}10 / 10 & 11 / 8 & 12 / 8 & 550 & 1 / 6 & 2 / 5 & 3 / 6\end{array}$
$\begin{array}{llllllllllllll}9 / 29 & 10 / 29 & 11 / 27 & 12 / 27 & 549 & 1 / 26 & 2 / 24 & 3 / 25\end{array}$
$\begin{array}{llllllll}10 / 17 & 11 / 16 & 12 / 15 & 548 & 1 / 14 & 2 / 13 & 3 / 14\end{array}$
$\begin{array}{lllllll}10 / 7 & 11 / 5 & 12 / 4 & 547 & 1 / 3 & & 2 / 2\end{array} \quad 3 / 3$
$\begin{array}{lllllllllllllll}9 / 26 & 10 / 25 & 11 / 24 & 12 / 23 & 546 & 1 / 22 & 2 / 20\end{array}$

$\begin{array}{llllllllll}10 / 3 & 11 / 2 & 12 / 1 & 12 / 31 & 544 & 1 / 29 & 2 / 28\end{array}$
$\begin{array}{llllllllllll}9 / 23 & 10 / 22 & 11 / 20 & 12 / 20 & 543 & 1 / 18 & 2 / 17 & 3 / 18\end{array}$
$\begin{array}{lllllll}10 / 11 & 11 / 10 & 12 / 9 & 542 & 1 / 8 & & 2 / 6\end{array} \quad 3 / 8$
$\begin{array}{llllllllll}10 / 1 & 10 / 30 & 11 / 29 & 12 / 28 & 541 & 1 / 27 & 2 / 25\end{array}$ $\begin{array}{llllllllllllllllllll}9 / 19 & 10 / 19 & 11 / 17 & 12 / 17 & 540 & 1 / 15 & 2 / 13 & 3 / 15\end{array}$
$\begin{array}{lllllll}10 / 8 & 11 / 7 & 12 / 6 & 539 & 1 / 5 & 2 / 3 & 3 / 5\end{array}$
$\begin{array}{llllllllllllllllll}9 / 28 & 10 / 27 & 11 / 25 & 12 / 25 & 538 & 1 / 23 & 2 / 22\end{array}$

## CYRUS

$\begin{array}{lllllll}1 & 538 & 3 / 24 & 4 / 22 & 5 / 21 & 6 / 20 & 7 / 20 \\ 8 / 18\end{array}$
 $\begin{array}{llllllllllllll}2 & 537 & 3 / 12 & 4 / 10 & 5 / 10 & 6 / 8 & 7 / 8 & 8 / 7 & 9 / 5 & 10 / 5 & 11 / 3 & 12 / 3 & 536 & 1 / 1\end{array}$ $3536 \quad 3 / 30 \quad 4 / 29 \quad 5 / 296 / 27 \quad 7 / 27.8 / 25$

 $\begin{array}{lllllll}5 & 534 & 4 / 8 & 5 / 7 & 6 / 6 & 7 / 6 & 8 / 4\end{array} \quad 9 / 3$

6533 3/28 $4 / 265 / 25 \quad 6 / 24 \quad 7 / 248 / 22$
$\begin{array}{lllllll}10 / 13 & 11 / 11 & 12 / 11 & 534 & 1 / 10 & 2 / 8 & 3 / 9\end{array}$
$\begin{array}{lllllllll}10 / 2 & 11 / 1 & 12 / 1 & 12 / 30 & 533 & 1 / 28 & 2 / 27\end{array}$

$\begin{array}{lllllll}10 / 10 & 11 / 8 & 12 / 8 & 531 & 1 / 6 & 2 / 5 & 3 / 7\end{array}$
$\begin{array}{llllllllll}7 & 532 & 4 / 16 & 5 / 15 & 6 / 13 & 7 / 13 & 8 / 11 & 9 / 10\end{array}$
$\begin{array}{lllllllllllll}9 / 29 & 10 / 29 & 11 / 27 & 12 / 27 & 530 & 1 / 25 & 2 / 24\end{array}$ $\begin{array}{llllllllllllllllllll}9 & 530 & 3 / 26 & 4 / 24 & 5 / 23 & 6 / 22 & 7 / 21 & 8 / 20 & 9 / 18 & 10 / 18 & 11 / 16 & 12 / 16 & 529 & 1 / 14 & 2 / 13 & 3 / 13\end{array}$

## CAMBYSES



## DARIUS I

Nebuchadnezzar IV = year 1 of Darius I

| 1 | 521 | $4 / 14$ | $5 / 13$ | $6 / 12$ | $7 / 11$ | $8 / 10$ | $9 / 8$ |  | $10 / 8$ | $11 / 6$ | $12 / 6$ | 520 | $1 / 4$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 520 | $4 / 3$ | $5 / 2$ | $6 / 1$ | $6 / 30$ | $7 / 30$ | $8 / 29$ | $9 / 27$ | $10 / 27$ | $11 / 25$ | $12 / 25$ | 519 | $1 / 23$ | $2 / 21$ |
| 3 | 519 | $3 / 23$ | $4 / 22$ | $5 / 21$ | $6 / 20$ | $7 / 19$ | $8 / 18$ | $9 / 17$ | $10 / 16$ | $11 / 15$ | $12 / 14$ | 518 | $1 / 12$ | $2 / 11$ |
| 4 | 518 | $4 / 11$ | $5 / 10$ | $6 / 9$ | $7 / 9$ | $8 / 7$ | $9 / 6$ | $10 / 5$ | $11 / 4$ | $12 / 3$ | 517 | $1 / 2$ | $1 / 31$ | $3 / 1$ |
| 5 | 517 | $3 / 30$ | $4 / 29$ | $5 / 29$ | $6 / 27$ | $7 / 27$ | $8 / 25$ | $9 / 24$ | $10 / 23$ | $11 / 22$ |  | $12 / 21$ | 516 | $1 / 20$ |
| $2 / 18$ | $3 / 20$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | 516 | $4 / 18$ | $5 / 18$ | $6 / 16$ | $7 / 16$ | $8 / 14$ | $9 / 13$ | $10 / 13$ | $11 / 11$ | $12 / 11$ | 515 | $1 / 9$ | $2 / 8$ | $3 / 10$ |
| 7 | 515 | $4 / 8$ | $5 / 7$ | $6 / 6$ | $7 / 5$ | $8 / 4$ | $9 / 3$ | $10 / 2$ | $11 / 1$ | $11 / 30$ | $12 / 30$ | 514 | $1 / 29$ | $2 / 27$ |
| 8 | 514 | $3 / 29$ | $4 / 27$ | $5 / 26$ | $6 / 25$ | $7 / 24$ | $8 / 23$ | $9 / 21$ | $10 / 21$ | $11 / 19$ | $12 / 19$ | 513 | $1 / 18$ | $2 / 16$ |
| 9 | 513 | $4 / 16$ | $5 / 15$ | $6 / 13$ | $7 / 13$ | $8 / 11$ | $9 / 10$ | $10 / 9$ | $11 / 8$ | $12 / 7$ | 512 | $1 / 6$ | $2 / 4$ | $3 / 6$ |
| 10 | 512 | $4 / 5$ | $5 / 4$ | $6 / 2$ | $7 / 2$ | $8 / 1$ | $8 / 30$ | $9 / 29$ | $10 / 28$ | $11 / 27$ | $12 / 26$ | 511 | $1 / 25$ | $2 / 23$ |
| 11 | 511 | $3 / 25$ | $4 / 23$ | $5 / 23$ | $6 / 21$ | $7 / 21$ | $8 / 20$ | $9 / 18$ | $10 / 18$ | $11 / 16$ | $12 / 16$ | 510 | $1 / 14$ | $2 / 13$ |
| 12 | 510 | $4 / 13$ | $5 / 12$ | $6 / 11$ | $7 / 10$ | $8 / 9$ | $9 / 7$ | $10 / 7$ | $11 / 6$ | $12 / 5$ | 509 | $1 / 4$ | $2 / 2$ | $3 / 2$ |
| 13 | 509 | $4 / 1$ | $4 / 30$ | $5 / 30$ | $6 / 29$ | $7 / 28$ | $8 / 27$ | $9 / 25$ | $10 / 25$ | $11 / 23$ | $12 / 23$ | 508 | $1 / 21$ | $2 / 20$ |
| 14 | 508 | $4 / 20$ | $5 / 19$ | $6 / 18$ | $7 / 18$ | $8 / 16$ | $9 / 15$ | $10 / 14$ | $11 / 13$ | $12 / 12$ | 507 | $1 / 11$ | $2 / 9$ | $3 / 11$ |
| 15 | 507 | $4 / 9$ | $5 / 9$ | $6 / 7$ | $7 / 7$ | $8 / 5$ | $9 / 4$ | $10 / 4$ | $11 / 2$ | $12 / 2$ | 506 | $1 / 1$ | $1 / 30$ | $3 / 1$ |
| 16 | 506 | $3 / 30$ | $4 / 28$ | $5 / 28$ | $6 / 26$ | $7 / 26$ | $8 / 24$ | $9 / 23$ | $10 / 22$ | $11 / 21$ | $12 / 20$ | 505 | $1 / 19$ | $2 / 17$ |
| 17 | 505 | $4 / 17$ | $5 / 16$ | $6 / 14$ | $7 / 14$ | $8 / 13$ | $9 / 11$ | $10 / 11$ | $11 / 9$ | $12 / 9$ | 504 | $1 / 7$ | $2 / 6$ | $3 / 7$ |
| 18 | 504 | $4 / 6$ | $5 / 5$ | $6 / 4$ | $7 / 4$ | $8 / 2$ | $9 / 1$ | $9 / 30$ | $10 / 30$ | $11 / 28$ | $12 / 28$ | 503 | $1 / 26$ | $2 / 25$ |
| 19 | 503 | $3 / 27$ | $4 / 25$ | $5 / 24$ | $6 / 23$ | $7 / 22$ | $8 / 21$ | $9 / 20$ | $10 / 18$ | $11 / 18$ | $12 / 17$ | 502 | $1 / 15$ | $2 / 14$ |
| 20 | 502 | $4 / 14$ | $5 / 13$ | $6 / 12$ | $7 / 12$ | $8 / 10$ | $9 / 9$ | $10 / 8$ | $11 / 7$ | $12 / 6$ | 501 | $1 / 5$ | $2 / 3$ | $3 / 4$ |



## XERXES

$\begin{array}{lllllll}1 & 485 & 4 / 6 & 5 / 5 & 6 / 3 & 7 / 3 & 8 / 2\end{array} \quad 8 / 31$
$\begin{array}{llllllllll}9 / 30 & 10 / 29 & 11 / 28 & 12 / 27 & 484 & 1 / 26 & 2 / 24\end{array}$
$\begin{array}{lllllllllllllllllll}2 & 484 & 3 / 26 & 4 / 24 & 5 / 24 & 6 / 22 & 7 / 22 & 8 / 21 & 9 / 19 & 10 / 19 & 11 / 17 & 12 / 17 & 483 & 1 / 15 & 2 / 14 & 3 / 15\end{array}$
3483 4/14 5/13 6/12 7/11 8/10 9/9
$\begin{array}{lllllll}4 & 482 & 4 / 3 & 5 / 3 & 6 / 1 & 7 / 1 & 7 / 30\end{array} 8 / 29$
5481 3/23 4/21 5/20 6/19 7/19 8/17
$\begin{array}{llllll}6 & 480 & 4 / 11 & 5 / 10 & 6 / 8 & 7 / 8 \\ 8 / 7 & 9 / 5\end{array}$
$\begin{array}{llllllllllll} & 779 & 3 / 31 & 4 / 29 & 5 / 29 & 6 / 27 & 7 / 27 & 8 / 26\end{array}$
$84784 / 195 / 186 / 177 / 16$ 8/15 9/14 $\begin{array}{lllllll}9 & 477 & 4 / 8 & 5 / 7 & 6 / 5 & 7 / 5 & 8 / 3\end{array} \quad 9 / 2$ 10476 3/28 $4 / 265 / 25 \quad 6 / 24 \quad 7 / 248 / 22$
$114754 / 15$ 5/15 6/13 7/13 8/11 9/10 $\begin{array}{lllllll}12 & 474 & 4 / 5 & 5 / 4 & 6 / 3 & 7 / 2 & 8 / 1\end{array} 8 / 31$ 13473 4/22 5/22 6/21 7/20 8/19 9/17 14472 4/12 $5 / 126 / 10 \quad 7 / 108 / 9 \quad 9 / 7$ $154714 / 2 \quad 5 / 1 \quad 5 / 30 \quad 6 / 29 \quad 7 / 29 \quad 8 / 27$
$\begin{array}{lllllll}10 / 8 & 11 / 7 & 12 / 6 & 482 & 1 / 5 & 2 / 3 & 3 / 5\end{array}$ $\begin{array}{llllllllllll}9 / 28 & 10 / 27 & 11 / 25 & 12 / 25 & 481 & 1 / 23 & 2 / 22\end{array}$


$\begin{array}{lllllll}10 / 13 & 11 / 12 & 12 / 11 & 477 & 1 / 10 & 2 / 8 & 3 / 9\end{array}$
$\begin{array}{llllllllllll}10 / 1 & 10 / 31 & 11 / 29 & 12 / 29 & 476 & 1 / 27 & 2 / 26\end{array}$

$\begin{array}{llllll}10 / 10 & 11 / 8 & 12 / 8 & 474 & 1 / 6 & 2 / 5\end{array} \quad 3 / 6$

$\begin{array}{llllllll}10 / 17 & 11 / 15 & 12 / 15 & 472 & 1 / 13 & 2 / 12 & 3 / 13\end{array}$
$\begin{array}{llllllll}10 / 7 & 11 / 6 & 12 / 5 & 471 & 1 / 4 & 2 / 2 & 3 / 3\end{array}$


Year Nis Ais Sim Duz Abu Ulu U II Tas Ara Kib Ter Sba add A II

$\begin{array}{lllllll}17 & 469 & 4 / 9 & 5 / 8 & 6 / 7 & 7 / 6 & 8 / 5\end{array} \quad 9 / 4$ 18468 3/29 4/28 $5 / 27 \quad 6 / 26 \quad 7 / 25 \quad 8 / 24$
$\begin{array}{llllllllllll}19 & 467 & 4 / 17 & 5 / 16 & 6 / 15 & 7 / 15 & 8 / 13 & 9 / 12\end{array}$ $\begin{array}{lllllll}20 & 466 & 4 / 6 & 5 / 6 & 6 / 4 & 7 / 4 & 8 / 3\end{array} \quad 9 / 1$
$10 / 15 \quad 11 / 13 \quad 12 / 13 \quad 469 \quad 1 / 11 \quad 2 / 10 \quad 3 / 10$
$\begin{array}{llllllll}10 / 3 & 11 / 2 & 12 / 1 & 12 / 31 & 468 & 1 / 29 & 2 / 28\end{array}$
$\begin{array}{lllllllllll}9 / 23 & 10 / 22 & 11 / 20 & 12 / 20 & 467 & 1 / 18 & 2 / 17 & 3 / 18\end{array}$
$10 / 11 \quad 11 / 10 \quad 12 / 9 \quad 466$
$\begin{array}{llllllllllll}10 / 1 & 10 / 30 & 11 / 29 & 12 / 28 & 465 & 1 / 27 & 2 / 25\end{array}$
$\begin{array}{llllllllllllllll}21 & 465 & 3 / 25 & 4 / 24 & 5 / 24 & 6 / 22 & 7 / 22 & 8 / 20 & 9 / 19 & 10 / 19 & 11 / 17 & 12 / 17 & 464 & 1 / 15 & 2 / 13 & 3 / 15\end{array}$

## ARTAXERXES I

1464 4/13 $5 / 13 \quad 6 / 12 \quad 7 / 118 / 10 \quad 9 / 9$ $\begin{array}{lllllll}2 & 463 & 4 / 3 & 5 / 3 & 6 / 1 & 7 / 1 & 7 / 30\end{array} 8 / 29$ $\begin{array}{lllllll} & 3 & 462 & 4 / 22 & 5 / 21 & 6 / 20 & 7 / 20 \\ 8 / 18 & 9 / 17\end{array}$ $\begin{array}{lllllll}4 & 461 & 4 / 11 & 5 / 10 & 6 / 8 & 7 / 8 & 8 / 7\end{array} \quad 9 / 5$ $54603 / 314 / 30 \quad 5 / 29 \quad 6 / 27 \quad 7 / 27 \quad 8 / 25$
$\begin{array}{llllllll}6 & 459 & 4 / 19 & 5 / 18 & 6 / 17 & 7 / 16 & 8 / 15 & 9 / 13\end{array}$
$\begin{array}{lllllll}7 & 458 & 4 / 8 & 5 / 7 & 6 / 6 & 7 / 6 & 8 / 4\end{array} \quad 9 / 3$
8457 3/27 $4 / 26$ 5/25 6/24 $7 / 248 / 22$
 $\begin{array}{lllllll}10 & 455 & 4 / 4 & 5 / 4 & 6 / 3 & 7 / 2 & 8 / 1\end{array} \quad 8 / 30$

$114544 / 23 \begin{array}{llllll} & 5 / 23 & 6 / 22 & 7 / 21 & 8 / 20 & 9 / 18\end{array}$ | 12 | 453 | $4 / 12$ | $5 / 11$ | $6 / 10$ | $7 / 9$ | $8 / 8$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | $\begin{array}{llllllll}13 & 452 & 4 / 2 & 5 / 1 & 5 / 30 & 6 / 29 & 7 / 28 & 8 / 27\end{array}$

 $\begin{array}{lllllll}15 & 450 & 4 / 10 & 5 / 9 & 6 / 8 & 7 / 7 & 8 / 6\end{array} \quad 9 / 4$
$164493 / 29 \quad 4 / 27 \quad 5 / 27 \quad 6 / 26 \quad 7 / 25 \quad 8 / 24$ $174484 / 16 \quad 5 / 16 \quad 6 / 14 \quad 7 / 14 \quad 8 / 12 \quad 9 / 11$ $\begin{array}{lllllll}18 & 447 & 4 / 6 & 5 / 5 & 6 / 3 & 7 / 3 & 8 / 2\end{array} \quad 8 / 31$
 $\begin{array}{llllllll}20 & 445 & 4 / 13 & 5 / 12 & 6 / 11 & 7 / 10 & 8 / 9 & 9 / 8\end{array}$
$\begin{array}{lllllllll}21 & 444 & 4 / 3 & 5 / 2 & 5 / 31 & 6 / 30 & 7 / 29 & 8 / 28\end{array}$ $\begin{array}{llllllllll}22 & 443 & 4 / 22 & 5 / 21 & 6 / 20 & 7 / 19 & 8 / 17 & 9 / 16\end{array}$ $\begin{array}{lllllll}23 & 442 & 4 / 11 & 5 / 11 & 6 / 9 & 7 / 9 & 8 / 7 \\ 9 / 5\end{array}$ $244413 / 314 / 295 / 296 / 27 \quad 7 / 27 \quad 8 / 25$

$\begin{array}{lllllll}10 / 8 & 11 / 7 & 12 / 6 & 463 & 1 / 4 & 2 / 3 & 3 / 4\end{array}$ $\begin{array}{lllllllllll}9 / 28 & 10 / 27 & 11 / 25 & 12 / 25 & 462 & 1 / 23 & 2 / 22 & 3 / 24\end{array}$ $10 / 16 \quad 11 / 15 \quad 12 / 14 \quad 461 \quad 1 / 13 \quad 2 / 113 / 12$
$\begin{array}{lllllll}10 / 5 & 11 / 3 & 12 / 3 & 460 & 1 / 1 & 1 / 31 & 3 / 1\end{array}$ $\begin{array}{llllllllllll}9 / 24 & 10 / 23 & 11 / 22 & 12 / 22 & 459 & 1 / 20 & 2 / 19 & 3 / 20\end{array}$
$\begin{array}{lllllll}10 / 13 & 11 / 11 & 12 / 11 & 458 & 1 / 10 & 2 / 8 & 3 / 9\end{array}$
$\begin{array}{llllllllll}10 / 2 & 11 / 1 & 11 / 30 & 12 / 30 & 457 & 1 / 28 & 2 / 27\end{array}$
$\begin{array}{lllllllllllllllllll}9 / 21 & 10 / 20 & 11 / 19 & 12 / 18 & 456 & 1 / 17 & 2 / 15 & 3 / 16\end{array}$
$\begin{array}{lllllll}10 / 10 & 11 / 8 & 12 / 8 & 455 & 1 / 6 & 2 / 4 & 3 / 6\end{array}$
$\begin{array}{lllllllllllllllll}9 / 29 & 10 / 29 & 11 / 27 & 12 / 27 & 454 & 1 / 25 & 2 / 23 & 3 / 25\end{array}$
$10 / 18 \quad 11 / 16 \quad 12 / 16 \quad 453 \quad 1 / 14 \quad 2 / 13 \quad 3 / 13$
$\begin{array}{lllllll}10 / 6 & 11 / 5 & 12 / 4 & 452 & 1 / 3 & 2 / 1 & 3 / 3\end{array}$

$\begin{array}{llllll}10 / 14 & 11 / 13 & 12 / 13 & 450 & 1 / 11 & 2 / 9\end{array} \quad 3 / 11$
$\begin{array}{llllllllll}10 / 4 & 11 / 2 & 12 / 2 & 12 / 31 & 449 & 1 / 30 & 2 / 28\end{array}$
$\begin{array}{llllllllllllll}9 / 22 & 10 / 22 & 11 / 20 & 12 / 20 & 448 & 1 / 18 & 2 / 17 & 3 / 18\end{array}$
$\begin{array}{lllllll}10 / 11 & 11 / 9 & 12 / 8 & 447 & 1 / 7 & 2 / 5 & 3 / 7\end{array}$
$\begin{array}{llllllllll}9 / 30 & 10 / 29 & 11 / 28 & 12 / 27 & 446 & 1 / 26 & 2 / 24\end{array}$
$10 / 19 \quad 11 / 17 \quad 12 / 17 \quad 445 \quad 1 / 15 \quad 2 / 143 / 14$
$\begin{array}{lllllll}10 / 7 & 11 / 6 & 12 / 5 & 444 & 1 / 4 & 2 / 2 & 3 / 4\end{array}$

$\begin{array}{lllllllllllllllll}10 / 15 & 11 / 14 & 12 / 14 & 442 & 1 / 12 & 2 / 11 & 3 / 13\end{array}$
$\begin{array}{lllllll}10 / 5 & 11 / 3 & 12 / 3 & 441 & 1 / 1 & 1 / 31 & 3 / 1\end{array}$
$9 / 23 \quad 10 / 23 \quad 11 / 21 \quad 12 / 21 \quad 4401 / 19 \quad 2 / 17 \quad 3 / 19$
$\begin{array}{llllll}10 / 12 & 11 / 11 & 12 / 10 & 439 & 1 / 8 & 2 / 7 \\ 3 / 8\end{array}$


## DARIUS II

$\begin{array}{lllllll}1 & 423 & 4 / 11 & 5 / 11 & 6 / 9 & 7 / 9 & 8 / 7\end{array} \quad 9 / 5$
$24223 / 314 / 305 / 296 / 28 \quad 7 / 28$ 8/26
 $\begin{array}{lllllll}4 & 420 & 4 / 7 & 5 / 6 & 6 / 5 & 7 / 4 & 8 / 3\end{array} \quad 9 / 2$ 5419 3/27 4/26 5/25 6/24 7/23 8/22
$\begin{array}{lllllll}6 & 418 & 4 / 15 & 5 / 14 & 6 / 13 & 7 / 13 & 8 / 11 \\ 9 / 10\end{array}$ $\begin{array}{lllllll}7 & 417 & 4 / 4 & 5 / 3 & 6 / 2 & 7 / 1 & 7 / 31\end{array} 8 / 29$ $84164 / 23 \quad 5 / 226 / 21 \quad 7 / 20 \quad 8 / 18 \quad 9 / 17$ $\begin{array}{llllllll}9 & 415 & 4 / 13 & 5 / 12 & 6 / 10 & 7 / 10 & 8 / 8 & 9 / 7\end{array}$ $\begin{array}{llllllll}10 & 414 & 4 / 2 & 5 / 1 & 5 / 30 & 6 / 29 & 7 / 28 & 8 / 27\end{array}$
$114134 / 195 / 186 / 17 \quad 7 / 17 \quad 8 / 15 \quad 9 / 14$ $\begin{array}{lllllll}12 & 412 & 4 / 8 & 5 / 8 & 6 / 6 & 7 / 6 & 8 / 5\end{array} \quad 9 / 3$ $134113 / 294 / 27 \quad 5 / 27 \quad 6 / 25 \quad 7 / 25 \quad 8 / 24$ $\begin{array}{llllllll}14 & 410 & 4 / 17 & 5 / 16 & 6 / 15 & 7 / 14 & 8 / 13 & 9 / 11\end{array}$ $\begin{array}{lllllll}15 & 409 & 4 / 5 & 5 / 4 & 6 / 3 & 7 / 3 & 8 / 1\end{array} \quad 8 / 31$
$\begin{array}{lllllll}10 / 5 & 11 / 3 & 12 / 3 & 422 & 1 / 1 & 1 / 31 & 3 / 1\end{array}$ $\begin{array}{lllllllllllll}9 / 24 & 10 / 24 & 11 / 22 & 12 / 21 & 421 & 1 / 20 & 2 / 18 & 3 / 19\end{array}$ $\begin{array}{lllllll}10 / 12 & 11 / 10 & 12 / 10 & 420 & 1 / 8 & & 2 / 6\end{array} \quad 3 / 8$
$\begin{array}{llllllll}10 / 1 & 10 / 31 & 11 / 29 & 12 / 29 & 419 & 1 / 27 & 2 / 25\end{array}$

$\begin{array}{lllllll}10 / 10 & 11 / 8 & 12 / 8 & 417 & 1 / 7 & 2 / 5 & 3 / 6\end{array}$ $\begin{array}{llllllllllll}9 / 28 & 10 / 28 & 11 / 26 & 12 / 26 & 416 & 1 / 25 & 2 / 23 & 3 / 25\end{array}$ $\begin{array}{llllllll}10 / 17 & 11 / 15 & 12 / 15 & 415 & 1 / 14 & 2 / 12 & 3 / 14\end{array}$ $\begin{array}{lllllll}10 / 6 & 11 / 5 & 12 / 4 & 414 & 1 / 3 & 2 / 1 & 3 / 3\end{array}$

$10 / 13 \quad 11 / 12 \quad 12 / 11 \quad 412 \quad 1 / 10 \quad 2 / 8 \quad 3 / 10$
$\begin{array}{lllllllll}10 / 3 & 11 / 1 & 12 / 1 & 12 / 30 & 411 & 1 / 29 & 2 / 27\end{array}$
$\begin{array}{lllllllllllllllll}9 / 22 & 10 / 22 & 11 / 20 & 12 / 20 & 410 & 1 / 18 & 2 / 17 & 3 / 18\end{array}$
$\begin{array}{lllllll}10 / 11 & 11 / 10 & 12 / 9 & 409 & 1 / 8 & 2 / 6 & 3 / 6\end{array}$
$\begin{array}{lllllllllllll}9 / 30 & 10 / 29 & 11 / 28 & 12 / 28 & 408 & 1 / 26 & 2 / 25\end{array}$
31

| $\underset{\text { B.c. }}{\text { Yed }}$ | Nrs | Ain | Sim | Duz | Abt | Uż | U II | Tas | Ara | Krs |  | Teb |  | San | Add | A II |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16408 | 3/26 | 4/24 | 5/24 | 6/22 | 7/22 | 8/20 | 9/19 | 10/18 | 11/17 | 12/17 | 407 | 1/15 |  | 2/14 | 3/16 |  |
| 17407 | 4/14 | 5/14 | 6/12 | 7/11 | 8/10 | 9/8 |  | 10/8 | 11/6 | 12/6 | 406 | $1 / 4$ |  | 2/3 | 3/5 |  |
| 18406 | $4 / 3$ | 5/3 | 6/2 | 7/1 | 7/30 | 8/29 |  | 9/27 | 10/26 | 11/25 |  | 12/24 |  | 1/23 | 2/22 | /22 |
| 19405 | 4/21 | 5/21 | 6/19 | 7/19 | 8/17 | 9/15 |  | 10/15 | 11/13 | 12/13 | 404 | 1/11 |  | 2/10 | 3/11 |  |

## ARTAXERXES II

$\begin{array}{lllllll}1 & 404 & 4 / 10 & 5 / 9 & 6 / 8 & 7 / 8 & 8 / 6\end{array} \quad 9 / 5$ 2403 3/30 4/29 5/28 6/27 7/26 8/25
 $\begin{array}{lllllll}4 & 401 & 4 / 7 & 5 / 6 & 6 / 5 & 7 / 4 & 8 / 3\end{array} \quad 9 / 1$ $\begin{array}{lllllllllll}5 & 400 & 3 / 27 & 4 / 25 & 5 / 25 & 6 / 23 & 7 / 23 & 8 / 22\end{array}$
$\begin{array}{lllllll}6 & 399 & 4 / 15 & 5 / 14 & 6 / 13 & 7 / 12 & 8 / 11 \\ 9 / 10\end{array}$ $\begin{array}{lllllll}7 & 398 & 4 / 5 & 5 / 4 & 6 / 3 & 7 / 2 & 7 / 31\end{array} 8 / 30$ $83974 / 23 \quad 5 / 22 \quad 6 / 21 \quad 7 / 20 \quad 8 / 18 \quad 9 / 17$ $\begin{array}{lllllllllll}9 & 396 & 4 / 12 & 5 / 12 & 6 / 10 & 7 / 10 & 8 / 8 & 9 / 6\end{array}$. $\begin{array}{lllllllllll}10 & 395 & 4 / 1 & 4 / 30 & 5 / 30 & 6 / 28 & 7 / 28 & 8 / 27\end{array}$ $\begin{array}{llllllllllllllllll}11 & 394 & 4 / 20 & 5 / 19 & 6 / 18 & 7 / 17 & 8 / 16\end{array}$ $\begin{array}{lllllll}12 & 393 & 4 / 8 & 5 / 7 & 6 / 6 & 7 / 6 & 8 / 4 \\ 9 / 3\end{array}$ $13 \quad 392 \quad 3 / 294 / 27 \quad 5 / 26 \quad 6 / 25 \quad 7 / 25 \quad 8 / 23$ $143914 / 17 \quad 5 / 16 \quad 6 / 14 \quad 7 / 148 / 13 \quad 9 / 11$ $\begin{array}{lllllll}15 & 390 & 4 / 6 & 5 / 5 & 6 / 4 & 7 / 3 & 8 / 2\end{array} \quad 9 / 1$
$\begin{array}{lllllll}10 / 4 & 11 / 3 & 12 / 2 & 403 & 1 / 1 & 1 / 30 & 2 / 28\end{array}$ $\begin{array}{lllllllllll}9 / 24 & 10 / 23 & 11 / 22 & 12 / 21 & 402 & 1 / 19 & 2 / 18 & 3 / 19\end{array}$ $\begin{array}{llllll}10 / 13 & 11 / 12 & 12 / 11 & 401 & 1 / 10 & 2 / 8\end{array} \quad 3 / 9$ $\begin{array}{lllllllllllllllll}10 / 1 & 10 / 30 & 11 / 29 & 12 / 28 & 400 & 1 / 27 & 2 / 25\end{array}$

$\begin{array}{lllllll}10 / 9 & 11 / 8 & 12 / 8 & 398 & 1 / 6 & 2 / 5 & 3 / 7\end{array}$
 $10 / 16 \quad 11 / 15 \quad 12 / 14 \quad 396 \quad 1 / 13 \quad 12 / 12 \quad 3 / 13$ $\begin{array}{lllllll}10 / 6 & 11 / 4 & 12 / 4 & 395 & 1 / 2 & 2 / 1 & 3 / 2\end{array}$

$\begin{array}{lllllll}10 / 14 & 11 / 13 & 12 / 12 & 393 & 1 / 10 & 2 / 9 & 3 / 9\end{array}$
$\begin{array}{llllllll}10 / 2 & 11 / 1 & 11 / 30 & 12 / 30 & 392 & 1 / 28 & 2 / 27\end{array}$
$\begin{array}{lllllllllllll}9 / 22 & 10 / 21 & 11 / 20 & 12 / 19 & 391 & 1 / 18 & 2 / 16 & 3 / 18\end{array}$
$\begin{array}{lllllll}10 / 11 & 11 / 9 & 12 / 9 & 390 & 1 / 7 & 2 / 5 & 3 / 7\end{array}$
$\begin{array}{llllllllll}9 / 30 & 10 / 30 & 11 / 28 & 12 / 28 & 389 & 1 / 26 & 2 / 25\end{array}$
$\begin{array}{lllllllllllllll}16 & 389 & 3 / 26 & 4 / 24 & 5 / 24 & 6 / 22 & 7 / 21 & 8 / 20 & 9 / 18 & 10 / 18 & 11 / 16 & 12 / 16 & 388 & 1 / 15 & 2 / 13\end{array} 3 / 15$
 $\begin{array}{lllllll}18 & 387 & 4 / 3 & 5 / 2 & 6 / 1 & 7 / 1 & 7 / 30\end{array} 8 / 28$ $\begin{array}{lllllllll}19 & 386 & 4 / 22 & 5 / 21 & 6 / 20 & 7 / 20 & 8 / 18 & 9 / 17\end{array}$ $\begin{array}{lllllll}20 & 385 & 4 / 10 & 5 / 9 & 6 / 8 & 7 / 8 & 8 / 6\end{array} \quad 9 / 5$ $\begin{array}{lllllllllllll} & 21 & 384 & 4 / 29 & 5 / 28 & 6 / 27 & 7 / 26 & 8 / 25 & 9 / 23\end{array}$ $\begin{array}{llllllllllllllll}22 & 383 & 4 / 18 & 5 / 17 & 6 / 16 & 7 / 15 & 8 / 14 & 9 / 13\end{array}$ $\begin{array}{lllllll}23 & 382 & 4 / 8 & 5 / 7 & 6 / 5 & 7 / 5 & 8 / 3\end{array} \quad 9 / 2$
 $\begin{array}{llllllllll}25 & 380 & 4 / 15 & 5 / 15 & 6 / 13 & 7 / 12 & 8 / 11 & 9 / 9\end{array}$ $\begin{array}{lllllll}26 & 379 & 4 / 5 & 5 / 4 & 6 / 3 & 7 / 2 & 7 / 31 \\ 8 / 30\end{array}$ $273784 / 235 / 226 / 21 \quad 7 / 20 \quad 8 / 19 \quad 9 / 18$ $\begin{array}{lllllll}28 & 377 & 4 / 11 & 5 / 11 & 6 / 9 & 7 / 9 & 8 / 7\end{array} \quad 9 / 6$
 $\begin{array}{llllllllllllll} & 30 & 375 & 4 / 19 & 5 / 19 & 6 / 17 & 7 / 17 & 8 / 15\end{array}$
$\begin{array}{lllllll}10 / 7 & 11 / 6 & 12 / 5 & 387 & 1 / 4 & 2 / 2 & 3 / 4\end{array}$
$\begin{array}{llllllllllllllllll}9 / 27 & 10 / 26 & 11 / 25 & 12 / 24 & 386 & 1 / 23 & 2 / 21 & 3 / 23\end{array}$
$10 / 16 \quad 11 / 14 \quad 12 / 14 \quad 385 \quad 1 / 12 \quad 2 / 11 \quad 3 / 11$
$\begin{array}{llllllll}10 / 4 & 11 / 3 & 12 / 2 & 384 & 1 / 1 & 1 / 30 & 3 / 1 & 3 / 30\end{array}$
$\begin{array}{llllllll}10 / 23 & 11 / 21 & 12 / 21 & 383 & 1 / 19 & 2 / 18 & 3 / 19\end{array}$
$\begin{array}{lllllll}10 / 12 & 11 / 11 & 12 / 11 & 382 & 1 / 10 & 2 / 8 & 3 / 10\end{array}$
$\begin{array}{lllllllllll}10 / 2 & 10 / 31 & 11 / 29 & 12 / 29 & 381 & 1 / 27 & 2 / 26\end{array}$

$\begin{array}{lllllll}10 / 9 & 11 / 7 & 12 / 7 & 379 & 1 / 6 & 2 / 4 & 3 / 6\end{array}$
$\begin{array}{llllllllllll}9 / 28 & 10 / 28 & 11 / 26 & 12 / 26 & 378 & 1 / 24 & 2 / 23 & 3 / 24\end{array}$
$\begin{array}{llllllll}10 / 17 & 11 / 16 & 12 / 15 & 377 & 1 / 13 & 2 / 12 & 3 / 12\end{array}$
$\begin{array}{lllllll}10 / 5 & 11 / 4 & 12 / 3 & 376 & 1 / 2 & 1 / 31 & 3 / 2\end{array}$
$\begin{array}{llllllllllllllllllll}9 / 25 & 10 / 24 & 11 / 23 & 12 / 22 & 375 & 1 / 21 & 2 / 19 & 3 / 21\end{array}$
$\begin{array}{llllll}10 / 14 & 11 / 12 & 12 / 12 & 374 & 1 / 10 & 2 / 9\end{array} \quad 3 / 10$

| $\mathrm{Y}_{\text {mara }}^{\text {b.c. }}$ | Nı | Axa | Sim | Duz | Abu | ULt | U II | Tas | Ars | Kis |  | T |  | Sata | D | A II |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 31374 | 4/9 | 5/8 | 6/7 | 7/6 | 8/5 | 9/4 |  | 10/3 | 11/2 | 12/2 |  | 12/31 | 373 | 1/30 | $2 / 28$ |  |
| 32373 | 3/29 | 4/27 | 5/26 | 6/25 | 7/24 | 8/23 |  | 9/22 | 10/21 | 11/20 |  | 12/20 |  | 1/18 | 2/17 | /18 |
| 33372 | 4/17 | 5/16 | 6/14 | 7/14 | 8/12 | 9/11 |  | 10/11 | 11/9 | 12/9 | 371 | 1/7 |  | .2/6 | 3/8 |  |
| 34371 | 4/6 | 5/6 | 6/4 | 7/4 | 8/2 | 8/31 |  | $9 / 30$ | 10/29 | 11/28 |  | 12/27 |  | 1/26 | 2/24 |  |
| 35370 | 3/26 | 4/24 | 5/24 | 6/23 | 7/22 | 8/21 | 9/19 | 10/19 | 11/17 | 12/17 | 369 | 1/15 |  | 2/14 | 3/14 |  |
| 36369 | 4/13 | 5/12 | 6/11 | 7/10 | 8/9 | 9/8 |  | 10/7 | 11/6 | 12/5 | 368 | 1/4 |  | 2/2 | 3/4 |  |
| 37368 | 4/2 | $5 / 2$ | 5/31 | 6/30 | 7/29 | 8/28 |  | 9/27 | 10/26 | 11/24 |  | 12/24 |  | 1/22 | 2/ | 2 |
| 38367 | 4/21 | 5/21 | 6/19 | 7/19 | 8/18 | 9/16 |  | 10/15 | 11/14 | 12/13 | 366 | 1/12 |  | 2/10 | 3/12 |  |
| 39366 | 4/10 | 5/10 | 6/8 | 7/8 | 8/7 | $9 / 5$ |  | 10/5 | 11/3 | 12/3 | 365 | 1/1 |  | 1/31 | 2/29 |  |
| 40365 | 3/30 | 4/28 | 5/28 | 6/26 | 7/26 | 8/24 |  | 9/23 | 10/23 | 11/21 |  | 12/21 | 364 | 1/19 | 2/17 | 3/19 |
| 41364 | 4/18 | 5/17 | 6/16 | 7/15 | 8/14 | 9/13 |  | 10/12 | 11/11 | 12/10 | 363 | 1/9 |  | 2/8 | 3/9 |  |
| 42363 | 4/8 | 5/7 | 6/5 | 7/5 | 8/3 | 9/2 |  | 10/2 | 10/31 | 11/29 |  | 12/29 | 362 | 1/28 | 2/27 |  |
| 43362 | 3/28 | 4/27 | 5/26 | 6/24 | 7/24 | 8/22 |  | $9 / 21$ | 10/20 | 11/19 |  | 12/18 |  | 1/17 | 2/15 | 3/16 |
| 44361 | 4/15 | 5/14 | 6/12 | 7/12 | 8/11 | 9/9 |  | 10/9 | 11/7 | 12/7 | 360 | 1/5 |  | 2/4 | 3/5 |  |
| 45360 | 4/4 | 5/3 | 6/2 | 7/1 | 7/31 | 8/29 |  | 9/28 | 10/27 | 11/26 |  | 12/26 |  | 1/24 | 2/23 | 3/24 |
| 46359 | 4/22 | 5/22 | 6/21 | 7/20 | 8/19 | 9/17 |  | 10/17 | 11/15 | 12/15 | 358 | 1/14 |  | 2/12 | 3/13 |  |

## ARTAXERXES III

$13584 / 12 \quad 5 / 116 / 107 / 108 / 8 \quad 9 / 7$
2357 3/31 4/30 5/29 6/28 7/28 8/26
$33564 / 195 / 196 / 177 / 178 / 159 / 14$
$\begin{array}{lllllll}4 & 355 & 4 / 9 & 5 / 8 & 6 / 7 & 7 / 6 & 8 / 5\end{array} \quad 9 / 3$

6353 4/16 5/15 6/14 7/13 8/12 9/11 $\begin{array}{lllllll}7 & 352 & 4 / 6 & 5 / 5 & 6 / 3 & 7 / 3 & 8 / 1\end{array} 8 / 31$ 8351 3/26 4/24 5/24 6/22 7/22 8/20 9/19 $93504 / 135 / 136 / 127 / 118 / 109 / 8$ $103494 / 2 \quad 5 / 1 \quad 5 / 31 \quad 6 / 30 \quad 7 / 29 \quad 8 / 28$

11348 4/21 5/20 6/19 7/18 8/17 9/16 $\begin{array}{lllllll}12 & 347 & 4 / 10 & 5 / 10 & 6 / 8 & 7 / 8 & 8 / 6\end{array} \quad 9 / 5$
 $143454 / 185 / 176 / 167 / 158 / 149 / 12$ $\begin{array}{lllllll}15 & 344 & 4 / 7 & 5 / 6 & 6 / 5 & 7 / 4 & 8 / 3\end{array} \quad 9 / 2$

| 10/6 | 11/5 | 12/4 | 357 | 1/3 | 2/1 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9/25 | 10/24 | 11/23 |  | 12/22 356 | 1/21 |  |
| 10/14 | 11/12 | 12/12 | 355 | 1/11 | 2/9 | 3/11 |
| 10/3 | 11/2 | 12/1 |  | 12/31 354 | 1/29 | 2/28 |
| 9/22 | 10/22 | 11/20 |  | 12/20 353 | 1/18 |  |
| 10/10 | 11/9 | 12/8 | 352 | 1/7 | 2/5 | 3/7 |
| 9/30 | 10/29 | 11/28 |  | 12/27 351 | 1/25 | $2 / 24$ |
| 10/18 | 11/17 | 12/17 | 350 | 1/15 | 2/13 | $3 / 15$ |
| 10/8 | 11/7 | 12/6 | 349 | 1/4 | 2/3 | 3/3 |
| 9/26 | 10/26 | 11/24 |  | 12/24 348 | 1/22 | 2/21 |
| 10/15 | 11/14 | 12/13 | 347 | 1/12 | 2/10 | 3/11 |
| 10/5 | 11/3 | 12/3 | 346 | 1/2 | 1/31 | $3 / 2$ |
| 9/24 | 10/23 | 11/22 |  | 12/22 345 | 1/20 | 2/19 |
| 10/12 | 11/10 | 12/10 |  | 1/8 | 2/6 | 3/8 |
| 10/1 | 10/31 | 11/29 |  | 12/29 343 | 1/27 | 2/25 |


| $\underset{\mathrm{B.c}}{\mathrm{YE}_{\mathrm{EAR}}}$ | Nzs | AIa | Sim | Doz | Ast | Uxv- | U II | Tas | Ara | Kis |  | Teb |  | Sta | Add | A II |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 16343 | 3/2 | 4/26 | 5/2 | 6/24 | 7/23 | 8/ |  | 9/21 | 10/20 | 11/19 |  | 12 | 342 | 1/16 | $2 /$ | /16 |
| 17342 | 4/15 | 5/14 | 6/1 | 7/13 | 8/11 | 9/10 |  | 10/9 | 11/8 | 12/7 | 341 | 1/6 |  | 2/4 | $3 / 5$ |  |
| 18341 | $4 / 3$ | 5/3 | 6/2 | $7 / 1$ | 7/3 | 8/29 |  | 9/28 | 10/27 | 11/26 |  | 12/ | 340 | 1/24 | 2 | 4 |
| 19340 | 4/22 | 5/22 | 6/20 | 7/20 | 8/18 | 9/17 |  | 10/17 | 11/15 | 12/15 | 339 | 1/13 |  | 2/12 | 3/13 |  |
| 20339 | 4/12 | 5/11 | 6/10 | 7/9 | 8/8 | 9/7 |  | 10/6 | 11/5 | 12/4 | 338 | $1 / 3$ |  | 2/1 | $3 / 2$ |  |
| 21338 | $4 / 1$ | 5/1 | 5/30 | 6/29 | 7/28 | 8/27 |  | 9/25 | 10/25 | 11/23 |  | 12/23 | 337 | 1/21 | 2/20 | $3 / 20$ |

ARSES
$\begin{array}{lllllll}10 / 13 & 11 / 12 & 12 / 11 & 336 & 1 / 10 & 2 / 8 & 3 / 10\end{array}$ $\begin{array}{lllllllll}10 / 3 & 11 / 1 & 12 / 1 & 12 / 30 & 335 & 1 / 29 & 2 / 27\end{array}$

## DARIUS III

| 1 | 335 | $3 / 29$ | $4 / 27$ | $5 / 27$ | $6 / 25$ | $7 / 25$ | $8 / 24$ | $9 / 22$ | $10 / 22$ | $11 / 20$ | $12 / 20$ | 334 | $1 / 18$ | $2 / 17$ | $3 / 18$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | ---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2 | 334 | $4 / 17$ | $5 / 16$ | $6 / 15$ | $7 / 14$ | $8 / 13$ | $9 / 11$ | $10 / 11$ | $11 / 10$ | $12 / 9$ | 333 | $1 / 8$ | $2 / 6$ | $3 / 6$ |  |
| 3 | 333 | $4 / 5$ | $5 / 4$ | $6 / 3$ | $7 / 3$ | $8 / 1$ | $8 / 31$ | $9 / 29$ | $10 / 29$ | $11 / 27$ | $12 / 27$ | 332 | $1 / 25$ | $2 / 24$ |  |
| 4 | 332 | $3 / 25$ | $4 / 24$ | $5 / 23$ | $6 / 22$ | $7 / 22$ | $8 / 20$ | $9 / 19$ | $10 / 18$ | $11 / 17$ | $12 / 17$ | 331 | $1 / 15$ | $2 / 13$ | $3 / 15$ |
| 5 | 331 | $4 / 13$ | $5 / 13$ | $6 / 11$ | $7 / 11$ | $8 / 9$ | $9 / 8$ | $10 / 8$ | $11 / 6$ | $12 / 6$ | 330 | $1 / 4$ | $2 / 2$ | $3 / 4$ |  |

## ALEXANDER I

Year 6 of Alexander $I=$ year 5 of Darius III
$\begin{array}{lllllll}7 & 330 & 4 / 3 & 5 / 2 & 6 / 1 & 6 / 30 & 7 / 30\end{array} 8 / 28$ $83294 / 21 \quad 5 / 20 \quad 6 / 18 \quad 7 / 18 \quad 8 / 17 \quad 9 / 15$ $\begin{array}{lllllll}9 & 328 & 4 / 11 & 5 / 10 & 6 / 8 & 7 / 8 & 8 / 6\end{array} \quad 9 / 5$ $10327 \quad 3 / 31 \quad 4 / 295 / 28 \quad 6 / 27 \quad 7 / 26 \quad 8 / 25$ $\begin{array}{llllllllll}11 & 326 & 4 / 19 & 5 / 18 & 6 / 17 & 7 / 16 & 8 / 14 & 9 / 13\end{array}$ $\begin{array}{lllllll}12 & 325 & 4 / 7 & 5 / 6 & 6 / 4 & 7 / 4 & 8 / 3\end{array} \quad 9 / 1$ $\begin{array}{llllllll}13 & 324 & 3 / 27 & 4 / 25 & 5 / 25 & 6 / 23 & 7 / 23 & 8 / 22\end{array}$

$\begin{array}{lllllllllll}9 / 27 & 10 / 26 & 11 / 25 & 12 / 24 & 329 & 1 / 23 & 2 / 21 & 3 / 22\end{array}$
$\begin{array}{llllllll}10 / 15 & 11 / 13 & 12 / 13 & 328 & 1 / 12 & 2 / 11 & 3 / 12\end{array}$
$\begin{array}{lllllll}10 / 4 & 11 / 3 & 12 / 2 & 327 & 1 / 1 & & 1 / 31\end{array} 3 / 1$

$\begin{array}{lllllll}10 / 12 & 11 / 11 & 12 / 10 & 325 & 1 / 9 & 2 / 7 & 3 / 8\end{array}$
$\begin{array}{lllllllllllll}10 / 1 & 10 / 30 & 11 / 29 & 12 / 28 & 324 & 1 / 27 & 2 / 25\end{array}$

$\begin{array}{lllllll}10 / 9 & 11 / 8 & 12 / 7 & 322 & 1 / 6 & 2 / 4 & 3 / 6\end{array}$

## PHILIP ARRHIDAEUS

## Year 1 of Philip = year 14 of Alexander I

$\begin{array}{lllllll}2 & 322 & 4 / 4 & 5 / 4 & 6 / 2 & 7 / 2 & 7 / 31\end{array} 8 / 30$
 $\begin{array}{llllll}4 & 320 & 4 / 12 & 5 / 11 & 6 / 9 & 7 / 9\end{array} 8 / 8 \quad 9 / 6$ 5319 4/1 4 4/30 $5 / 30 \quad 6 / 28 \quad 7 / 28 \quad 8 / 27$
$\begin{array}{lllllllllllllllllllllll}9 / 28 & 10 / 28 & 11 / 26 & 12 / 26 & 321 & 1 / 24 & 2 / 23 & 3 / 23\end{array}$ $\begin{array}{lllllllll}10 / 16 & 11 / 15 & 12 / 14 & 320 & 1 / 13 & 2 / 11 & 3 / 13\end{array}$ $\begin{array}{lllllll}10 / 6 & 11 / 4 & 12 / 4 & 319 & 1 / 2 & 2 / 1 & 3 / 2\end{array}$ $\begin{array}{lllllllllllllllll}9 / 25 & 10 / 25 & 11 / 23 & 12 / 23 & 318 & 1 / 21 & 2 / 19 & 3 / 21\end{array}$

| $\mathrm{Y}_{\mathrm{BaR} . \mathrm{C}}$ | Nis | Axa | $S_{\text {IM }}$ | Duz | Abd | Uxd | U II | TAB | Ara | Krs | Teb |  | SHa | Add | A II |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6318 | 4/20 | 5/19 | 6/18 | 7/17 | 8/16 | 9/15 |  | 10/14 | 11/13 | 12/12 317 | 1/10 |  | 2/9 | $3 / 9$ |  |
| 7317 | 4/8 | $5 / 7$ | 6/6 | 7/6 | 8/4 | 9/3 |  | 10/2 | 11/1 | 11/30 | 12/30 | 316 | 1/28 | 2/27 |  |
| 8316 | 3/28 | 4/27 | 5/26 | 6/25 | 7/25 | 8/23 |  | 9/22 | 10/21 | 11/20 | 12/19 | 315 | 1/18 | 2/16 | 3/18 |

Years 1-6 of Antigonus as general = year 7 of Philip through year 5 of Alexander II

## ALEXANDER II

Year 1 of Alexander II = year 8 of Philip

| 2 | 315 | $4 / 16$ | $5 / 16$ | $6 / 14$ | $7 / 14$ | $8 / 13$ | $9 / 11$ | $10 / 11$ | $11 / 9$ | $12 / 9$ | 314 | $1 / 7$ | $2 / 5$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 3 | $3 / 7$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | 314 | $4 / 5$ | $5 / 5$ | $6 / 4$ | $7 / 3$ | $8 / 2$ | $9 / 1$ | $9 / 30$ | $10 / 30$ | $11 / 28$ |  | $12 / 27$ | 313 |
| 4 | $1 / 26$ | $2 / 24$ |  |  |  |  |  |  |  |  |  |  |  |
| 4 | 313 | $3 / 25$ | $4 / 23$ | $5 / 23$ | $6 / 22$ | $7 / 21$ | $8 / 20$ | $9 / 18$ | $10 / 18$ | $11 / 16$ | $12 / 16$ | 312 | $1 / 14$ |
| 5 | 312 | $4 / 13$ | $5 / 12$ | $6 / 11$ | $7 / 10$ | $8 / 9$ | $9 / 8$ | $10 / 7$ | $11 / 6$ | $12 / 5$ | 311 | $1 / 4$ | $2 / 13$ |

Years 6-10 of Alexander II = years 1-5 of Seleucid Era

## SELEUCID ERA

$\begin{array}{lllllll}1 & 311 & 4 / 3 & 5 / 2 & 5 / 31 & 6 / 30 & 7 / 30 \\ 8 / 28\end{array}$ $23104 / 22 \quad 5 / 21 \quad 6 / 19 \quad 7 / 198 / 17 \quad 9 / 16$ $\begin{array}{lllllll}3 & 309 & 4 / 10 & 5 / 10 & 6 / 8 & 7 / 7 & 8 / 6\end{array} \quad 9 / 4$ 4308 3/30 4/28 5/28 6/26 7/26 8/25
 $\begin{array}{lllllll}6 & 306 & 4 / 7 & 5 / 7 & 6 / 5 & 7 / 5 & 8 / 3\end{array} \quad 9 / 2$ $\begin{array}{lllllllll}7 & 305 & 3 / 26 & 4 / 25 & 5 / 24 & 6 / 23 & 7 / 23 & 8 / 21\end{array}$ $83044 / 145 / 146 / 12 \quad 7 / 12 \quad 8 / 11 \quad 9 / 9$ $\begin{array}{lllllll}9 & 303 & 4 / 4 & 5 / 3 & 6 / 2 & 7 / 1 & 7 / 31\end{array} 8 / 30$ $\begin{array}{lllllllll} & 10 & 302 & 4 / 23 & 5 / 22 & 6 / 21 & 7 / 20 & 8 / 19 & 9 / 18\end{array}$ $\begin{array}{lllllll}11 & 301 & 4 / 12 & 5 / 11 & 6 / 9 & 7 / 9 & 8 / 7 \\ 9 / 6\end{array}$ $\begin{array}{llllllll}12 & 300 & 4 / 1 & 5 / 1 & 5 / 30 & 6 / 28 & 7 / 28 & 8 / 26\end{array}$ $\begin{array}{lllllllll}13 & 299 & 4 / 20 & 5 / 19 & 6 / 17 & 7 / 17 & 8 / 15 & 9 / 14\end{array}$ $\begin{array}{lllllll}14 & 298 & 4 / 9 & 5 / 8 & 6 / 7 & 7 / 6 & 8 / 5 \\ 9 / 4\end{array}$ $15 \quad 297 \quad 3 / 28 \quad 4 / 26 \quad 5 / 26 \quad 6 / 25 \quad 7 / 24 \quad 8 / 23$
 $\begin{array}{lllllll}17 & 295 & 4 / 5 & 5 / 5 & 6 / 3 & 7 / 3 & 8 / 2\end{array} \quad 8 / 31$ $18 \quad 294 \quad 3 / 26 \quad 4 / 24 \quad 5 / 24 \quad 6 / 23 \quad 7 / 22 \quad 8 / 21$ $\begin{array}{lllllll}19 & 293 & 4 / 13 & 5 / 12 & 6 / 11 & 7 / 10 & 8 / 9\end{array} \quad 9 / 8$ $\begin{array}{llllllll}20 & 292 & 4 / 3 & 5 / 2 & 5 / 31 & 6 / 30 & 7 / 29 & 8 / 28\end{array}$

$\begin{array}{lllllllllllllllll}10 / 16 & 11 / 14 & 12 / 14 & 309 & 1 / 12 & 2 / 11 & 3 / 12\end{array}$
$\begin{array}{lllllll}10 / 4 & 11 / 2 & 12 / 2 & 12 / 31 & 308 & 1 / 30 & 2 / 28\end{array}$
$\begin{array}{llllllllllll}9 / 23 & 10 / 23 & 11 / 21 & 12 / 21 & 307 & 1 / 19 & 2 / 18 & 3 / 19\end{array}$
$\begin{array}{lllllll}10 / 12 & 11 / 11 & 12 / 10 & 306 & 1 / 9 & 2 / 7 & 3 / 9\end{array}$
$\begin{array}{llllllll}10 / 2 & 10 / 31 & 11 / 29 & 12 / 29 & 305 & 1 / 27 & 2 / 26\end{array}$

$\begin{array}{lllllll}10 / 9 & 11 / 7 & 12 / 7 & 303 & 1 / 5 & 2 / 4 & 3 / 5\end{array}$
$\begin{array}{llllllllllll}9 / 28 & 10 / 28 & 11 / 26 & 12 / 26 & 302 & 1 / 24 & 2 / 23 & 3 / 24\end{array}$

$\begin{array}{lllllll}10 / 5 & 11 / 4 & 12 / 3 & 300 & 1 / 2 & 2 / 1 & 3 / 2\end{array}$
$\begin{array}{lllllllllllllllll}9 / 25 & 10 / 24 & 11 / 23 & 12 / 22 & 299 & 1 / 21 & 2 / 19 & 3 / 21\end{array}$
$\begin{array}{llllll}10 / 14 & 11 / 12 & 12 / 12 & 298 & 1 / 10 & 2 / 9\end{array}$
$\begin{array}{llllllllll}10 / 3 & 11 / 2 & 12 / 1 & 12 / 30 & 297 & 1 / 29 & 2 / 27\end{array}$

$\begin{array}{llllllll}10 / 11 & 11 / 9 & 12 / 8 & 295 & 1 / 7 & & 2 / 5 & 3 / 7\end{array}$
$\begin{array}{lllllllllll}9 / 30 & 10 / 29 & 11 / 28 & 12 / 27 & 294 & 1 / 26 & 2 / 24\end{array}$
$\begin{array}{lllllll}10 / 19 & 11 / 17 & 12 / 17 & 293 & 1 / 15 & 2 / 14 & 3 / 14\end{array}$
$\begin{array}{lllllll}10 / 7 & 11 / 6 & 12 / 5 & 292 & 1 / 4 & 2 / 2 & 3 / 4\end{array}$
$\begin{array}{llllllllllllllll}9 / 27 & 10 / 26 & 11 / 24 & 12 / 24 & 291 & 1 / 22 & 2 / 21 & 3 / 22\end{array}$

## SELEUCID ERA

|  | Year | Nis | Ain | Sim | Duz | Abu | Ulu | U II | Tas | Ara | Kis |  | Teb | SEA |  | A II |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 21 | 21291 | 4/21 | 5/20 | 6/19 | 7/19 | 8/17 | 7 9/16 |  | 10/15 | 11/14 | 12/13 | 290 | 1/12 | 2/10 | 3/12 |  |
| 22 | 2290 | 4/10 | 5/10 | 6/8 | 7/8 | 8/7 | 9/5 |  | 10/5 | 11/3 | 12/3 | 289 | 1/1 | 1/31 | $2 / 29$ |  |
| 23 | 3289 | 3/30 | 4/28 | 5/28 | 6/26 | 7/26 | 8/24 |  | 9/23 | 10/23 | 11/21 |  | 12/21 288 | 1/19 | 2/17 | 3/19 |
| 24 | 4288 | 4/17 | 5/17 | 6/16 | 7/15 | 8/14 | 9/13 |  | 10/12 | 11/11 | 12/10 | 287 | 1/8 | 2/7 | $3 / 8$ |  |
| 25 | 5287 | $4 / 7$ | 5/7 | 6/5 | 7/5 | 8/3 | 9/2 |  | 10/2 | 10/31 | 11/29 |  | 12/29 286 | 1/27 | 2/26 |  |
| 26 | 6286 | 3/27 | 4/26 | 5/25 | 6/24 | 7/24 | 8/22 |  | 9/21 | 10/20 | 11/19 |  | 12/18 285 | 1/17 | 2/1 | 3/16 |
| 27 | 7285 | 4/14 | 5/14 | 6/12 | 7/12 | 8/11 | 9/9 |  | 10/9 | 11/7 | 12/7 | 284 | 1/5 | 2/4 | 3/6 |  |
| 28 | 8284 | 4/4 | 5/3 | 6/2 | 7/1 | 7/31 | 8/29 |  | 9/28 | 10/27 | 11/26 |  | 12/26 283 | 1/24 | 2/23 | 3/25 |
| 29 | 9283 | 4/23 | 5/22 | 6/21 | 7/20 | 8/19 | 9/17 |  | 10/17 | 11/15 | 12/15 | 282 | 1/14 | 2/12 | $3 / 13$ |  |
| 30 | 0282 | 4/12 | $5 / 11$ | 6/10 | 7/10 | 8/8 | $9 / 7$ |  | 10/6 | 11/5 | 12/4 | 281 | $1 / 3$ | 2/1 | $3 / 2$ |  |
| 31 | 281 | $3 / 3$ | 4/30 | 5/29 | 6/28 | 7/28 | 8/26 |  | 9/25 | 10/24 | 11/23 |  | 12/22 280 | 1/21 | 2/ | 3/20 |
| 32 | 2280 | 4/19 | 5/19 | 6/17 | 7/17 | 8/15 | 9/14 |  | 10/14 | 11/12 | 12/12 | 279 | 1/10 | 2/8 | 3/10 |  |
| 33 | 3279 | 4/8 | 5/8 | 6/7 | 7/6 | 8/5 | $9 / 3$ |  | 10/3 | 11/2 | 12/1 |  | 12/31 278 | 1/29 | $2 / 27$ |  |
| 34 | 4278 | 3/29 | 4/27 | 5/27 | 6/26 | 7/25 | 8/24 |  | 9/22 | 10/22 | 11/20 |  | 12/20 277 | 1/18 | 2/17 | 3/17 |
| 35 | 277 | 4/16 | 5/15 | 6/14 | 7/13 | 8/12 | 9/11 |  | 10/10 | 11/9 | 12/8 | 276 | $1 / 7$ | 2/5 | $3 / 7$ |  |
| 3 | 276 | 4/5 | 5/5 | 6/3 | $7 / 3$ | 8/1 | 8/31 |  | 9/30 | 10/29 | 11/28 |  | 12/27 275 | 1/26 | 2/25 |  |
| 37 | 275 | 3/26 | 4/24 | 5/24 | 6/22 | 7/22 | 8/20 | 9/19 | 10/18 | 11/17 | 12/17 | 274 | 1/15 | 2/13 | 3/15 |  |
| 38 | 274 | 4/14 | 5/13 | 6/12 | 7/11 | 8/10 | 9/8 |  | 10/8 | 11/6 | 12/6 | 273 | 1/4 | 2/3 | $3 / 3$ |  |
| 39 | 273 | 4/2 | 5/1 | 5/31 | 6/30 | 7/29 | 8/28 |  | 9/26 | 10/26 | 11/24 |  | 12/24 272 | 1/22 | 2/2 | /22 |
| 40 | 272 | 4/21 | 5/20 | 6/19 | 7/18 | 8/17 | 9/16 |  | 10/15 | 11/14 | 12/13 | 271 | 1/12 | 2/10 | 3/11 |  |
| 41 | 271 | 4/10 | 5/10 | 6/8 | 7/8 | 8/6 | 9/5 |  | 10/5 | 11/3 | 12/3 | 270 | 1/1 | 1/30 | $3 / 1$ |  |
| 42 | 270 | 3/30 | 4/29 | 5/28 | 6/27 | 7/27 | 8/25 |  | 9/24 | 10/23 | 11/22 |  | 12/21 269 | 1/20 | $2 / 18$ | 3/19 |
| 43 | 269 | 4/17 | 5/17 | 6/16 | 7/15 | 8/14 | 9/12 |  | 10/12 | 11/10 | 12/10 | 268 | 1/8 | 2/6 | 3/8 |  |
| 44 | 268 | $4 / 7$ | 5/6 | 6/5 | 7/4 | 8/3 | 9/2 |  | 10/1 | 10/31 | 11/29 |  | 12/29 267 | 1/27 | 2/25 |  |
| 45 | 267 | 3/27 | 4/26 | 5/25 | 6/24 | 7/23 | 8/22 |  | 9/21 | 10/20 | 11/19 |  | 12/18 266 | 1/16 | 2/15 | 3/16 |
| 46 | 266 | 4/15 | 5/14 | 6/13 | 7/13 | 8/11 | 9/10 |  | 10/9 | 11/8 | 12/7 | 265 | 1/6 | 2/4 | $3 / 5$ |  |
| 47 | 265 | $4 / 4$ | 5/3 | 6/2 | $7 / 1$ | 7/31 | 8/29 |  | 9/28 | 10/27 | 11/26 |  | 12/25 264 | 1/24 | 2/22 | 3/24 |
| 48 | 264 | 4/23 | 5/22 | 6/20 | 7/20 | 8/18 | 9/17 |  | 10/17 | 11/15 | 12/15 | 263 | 1/13 | 2/12 | 3/13 |  |
| 49 | 263 | 4/12 | 5/11 | 6/10 | 7/9 | 8/8 | 9/7 |  | 10/6 | 11/5 | 12/4 | 262 | $1 / 3$ | $2 / 1$ | 3/2 |  |
| 50 | 262 | 4/1 | $5 / 1$ | 5/30 | 6/29 | 7/28 | 8/27 |  | 9/25 | 10/25 | 11/23 |  | 12/23 261 | 1/21 | $2 / 20$ | $3 / 20$ |
| 51 | 261 | 4/18 | 5/18 | 6/17 | 7/17 | 8/15 | 9/14 |  | 10/13 | 11/12 | 12/11 | 260 | 1/10 | 2/8 | 3/10 |  |
| 52 | 260 | 4/8 | 5/8 | 6/6 | 7/6 | 8/5 | 9/3 |  | 10/3 | 11/1 | 12/1 |  | 12/30 259 | 1/29 | $2 / 27$ |  |
| 53 | 259 | 3/29 | 4/27 | 5/27 | 6/25 | 7/25 | 8/24 |  | 9/22 | 10/22 | 11/20 |  | 12/20 258 | 1/18 | 2/17 | 3/18 |
|  | 258 | 4/17 | 5/16 | 6/15 | 7/14 | 8/13 | 9/11 |  | 10/11 | 11/10 | 12/9 | 257 | 1/8 | 2/6 | 3/6 |  |
| 55 | 257 | 4/5 | 5/4 | 6/3 | $7 / 3$ | 8/1 | 8/31 |  | 9/29 | 10/29 | 11/27 |  | 12/27 256 | 1/25 | 2/24 |  |

## SELEUCID ERA

|  | Nıs | Ait | Sm | Doz | Abu | Uuv | UII | Tas | Ara | Kıs |  | тев | Sha | Add AII |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 56256 | 3/26 | 4/24 | 5/23 | 6/22 | 7/22 | 8/20 | 9/19 | 10/18 | 11/17 | 12/16 | 255 | 1/15 | 2/13 | $3 / 15$ |
| 57255 | 4/14 | 5/13 | 6/11 | 7/11 | 8/9 | 9/8 |  | 10/8 | 11/6 | 12/6 | 254 | 1/4 | 2/2 | 3/4 |
| 58254 | 4/3 | $5 / 2$ | 6/1 | 6/30 | 7/30 | 8/28 |  | 9/27 | 10/26 | 11/25 |  | 12/24 253 | 1/23 | 2/21 3/22 |
| 59253 | 4/20 | 5/20 | 6/18 | 7/18 | 8/17 | 9/15 |  | 10/15 | 11/13 | 12/13 | 252 | 1/11 | 2/10 | 3/11 |
| 60252 | 4/9 | 5/9 | 6/8 | 7/7 | 8/6 | 9/5 |  | 10/4 | 11/3 | 12/2 | 251 | 1/1 | 1/30 | 2/28 |
| 61251 | 3/30 | 4/29 | 5/28 | 6/27 | 7/26 | 8/25 |  | 9/23 | 10/23 | 11/22 |  | 12/21 250 | 1/19 | 2/18 3/19 |
| 62250 | 4/18 | $5 / 17$ | 6/16 | 7/16 | 8/14 | 9/13 |  | 10/12 | 11/11 | 12/10 | 249 | 1/9 | 2/7 | 3/8 |
| 63249 | 4/7 | 5/6 | 6/4 | 7/4 | 8/3 | 9/1 |  | 10/1 | 10/30 | 11/29 |  | 12/28 248 | 1/27 | 2/25 |
| 64248 | 3/27 | 4/25 | 5/25 | 6/23 | 7/23 | 8/22 |  | 9/20 | 10/20 | 11/18 |  | 12/18 247 | 1/16 | 2/15 3/16 |
| 65247 | $4 / 15$ | 5/14 | 6/13 | 7/12 | 8/11 | 9/10 |  | 10/9 | 11/8 | 12/7 | 246 | 1/6 | 2/4 | 3/6 |

## Year 65 Seleucid era = year 1 Arsacid era

$\begin{array}{lllllll}66 & 246 & 4 / 4 & 5 / 4 & 6 / 2 & 7 / 2 & 7 / 31\end{array} 8 / 30$ $67 \quad 2454 / 225 / 216 / 20 \quad 7 / 208 / 189 / 17$ $\begin{array}{lllllll}68 & 244 & 4 / 11 & 5 / 11 & 6 / 9 & 7 / 9 & 8 / 8\end{array} \quad 9 / 6$
 $702424 / 195 / 196 / 187 / 178 / 169 / 15$
$\begin{array}{lllllll}71 & 241 & 4 / 8 & 5 / 7 & 6 / 6 & 7 / 6 & 8 / 4\end{array} \quad 9 / 3$
 $732394 / 175 / 166 / 147 / 148 / 139 / 11$ $\begin{array}{lllllll}74 & 238 & 4 / 6 & 5 / 5 & 6 / 4 & 7 / 3 & 8 / 2\end{array} 9 / 1$ $\begin{array}{lllllllllllllllll}75 & 237 & 3 / 25 & 4 / 23 & 5 / 23 & 6 / 22 & 7 / 21 & 8 / 20 & 9 / 18 & 10 / 18 & 11 / 16 & 12 / 16 & 236 & 1 / 14 & 2 / 13 & 3 / 14\end{array}$
$\begin{array}{lllllllll}76 & 236 & 4 / 13 & 5 / 12 & 6 / 11 & 7 / 10 & 8 / 9 & 9 / 8\end{array}$ $\begin{array}{lllllllllllll}77 & 235 & 4 / 2 & 5 / 2 & 5 / 31 & 6 / 30 & 7 / 30 & 8 / 28\end{array}$
 $\begin{array}{llllllll}79 & 233 & 4 / 9 & 5 / 9 & 6 / 7 & 7 / 7 & 8 / 6 & 9 / 4\end{array}$ $80 \quad 2323 / 304 / 285 / 286 / 267 / 268 / 25$
 $\begin{array}{lllllll}82 & 230 & 4 / 8 & 5 / 7 & 6 / 5 & 7 / 5 & 8 / 3\end{array} \quad 9 / 2$ $83 \quad 2293 / 274 / 25 \quad 5 / 246 / 23 \quad 7 / 238 / 21$ $842284 / 15 \quad 5 / 146 / 127 / 12 \quad 8 / 11 \quad 9 / 9$ $\begin{array}{llllllllll}85 & 227 & 4 / 4 & 5 / 3 & 6 / 2 & 7 / 1 & 7 / 31 & 8 / 30\end{array}$
$\begin{array}{clllcllll}10 / 7 & 11 / 6 & 12 / 5 & 235 & 1 / 4 & 2 / 2 & 3 / 4 & \\ 9 / 27 & 10 / 26 & 11 / 25 & & 12 / 24 & 234 & 1 / 22 & 2 / 21 & 3 / 23 \\ 10 / 16 & 11 / 14 & 12 / 14 & 233 & 1 / 12 & & 2 / 10 & 3 / 11 & \\ 10 / 4 & 11 / 2 & 12 / 2 & & 12 / 31 & 232 & 1 / 30 & 2 / 28 & \\ 9 / 23 & 10 / 23 & 11 / 21 & & 12 / 21 & 231 & 1 / 19 & 2 / 18 & 3 / 20 \\ & & & & & & & & \\ 10 / 12 & 11 / 11 & 12 / 10 & 230 & 1 / 9 & & 2 / 8 & 3 / 9 & \\ 10 / 2 & 10 / 31 & 11 / 29 & & 12 / 29 & 229 & 1 / 27 & 2 / 26 & \\ 9 / 20 & 10 / 19 & 11 / 18 & & 12 / 17 & 228 & 1 / 16 & 2 / 14 & 3 / 16 \\ 10 / 9 & 11 / 7 & 12 / 7 & 227 & 1 / 5 & & 2 / 4 & 3 / 5 & \\ 9 / 28 & 10 / 28 & 11 / 26 & 12 / 26 & 226 & 1 / 24 & 2 / 23 & 3 / 24\end{array}$
37

## SELEUCID ERA

Year 86 Seleucid era $=$ year 22 Arsacid era


## SELEUCID ERA

Year 116 Seleucid era = year 52 Arsacid era


## SELEUCID ERA

Year 146 Seleucid era = year 82 Arsacid era


## SELEUCID ERA

Year 176 Seleucid era = year 112 Arsacid era

| $\mathrm{Y}_{\text {Pabs }}^{\text {B. }}$. | Nis | Aia | Sim | Duz | Abu | Uuv | U II | Tas | aba | Kıs |  | тив |  | Sha | Add | A II |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 176136 | 4/17 | 5/16 | 6/15 | 7/14 | 8/13 | 9/12 |  | 10/12 | 11/11 | 12/10 | 135 | 1/8 |  | 2/7 | 3/8 |  |
| 177135 | 4/7 | 5/7 | 6/5 | 7/5 | 8/3 | 9/2 |  | 10/2 | 10/31 | $11 / 29$ |  | 12/29 | 134 | $1 / 27$ | 2/26 |  |
| 178134 | 3/27 | 4/26 | 5/25 | 6/23 | 7/23 | 8/21 |  | $9 / 20$ | 10/20 | 11/19 |  | 12/18 | 133 | 1/17 | 2/15 | 3/16 |
| 179133 | 4/14 | 5/14 | 6/12 | 7/12 | 8/11 | 9/9 |  | 10/9 | 11/7 | 12/7 | 132 | 1/5 |  | 2/4 | 3/5 |  |
| 180132 | 4/4 | 5/3 | 6/2 | 7/1 | 7/31 | 8/29 |  | 9/29 | 10/27 | 11/26 |  | 12/26 | 131 | 1/24 | 2/23 | $3 / 24$ |

181131 4/22 5/22 6/21 7/20 8/19 9/17
$1821304 / 115 / 116 / 10 \quad 7 / 108 / 8 \quad 9 / 7$ $1831293 / 314 / 305 / 296 / 28 \quad 7 / 278 / 26$
 $\begin{array}{lllllll}185 & 127 & 4 / 8 & 5 / 8 & 6 / 7 & 7 / 6 & 8 / 4\end{array} \quad 9 / 3$
$1861263 / 294 / 275 / 276 / 26$ 7/25 8/24
 $\begin{array}{lllllll}188 & 124 & 4 / 5 & 5 / 5 & 6 / 3 & 7 / 2 & 8 / 1\end{array} \quad 8 / 30$ $\begin{array}{lllllllllllllll}189 & 123 & 3 / 26 & 4 / 24 & 5 / 24 & 6 / 22 & 7 / 22 & 8 / 20 & 9 / 19 & 10 / 17 & 11 / 17 & 12 / 16 & 122 & 1 / 15 & 2 / 13 \\ 3 / 15\end{array}$ $1901224 / 13 \quad 5 / 136 / 127 / 118 / 109 / 8$
$\begin{array}{lllllll}191 & 121 & 4 / 2 & 5 / 1 & 5 / 31 & 6 / 30 & 7 / 29 \\ 8 / 28\end{array}$ $1921204 / 205 / 206 / 187 / 188 / 179 / 15$ $\begin{array}{lllllll}193 & 119 & 4 / 9 & 5 / 9 & 6 / 7 & 7 / 7 & 8 / 5 \\ 9 / 4\end{array}$ $1941183 / 304 / 285 / 286 / 27 \quad 7 / 268 / 25$ 195117 4/17 5/16 6/14 7/14 8/12 9/11
$\begin{array}{lllllll}196 & 116 & 4 / 7 & 5 / 6 & 6 / 5 & 7 / 4 & 8 / 3\end{array} 9 / 2$ 197115 3/27 4/26 5/25 6/24 7/23 8/22 $1981144 / 15 \quad 5 / 146 / 13 \quad 7 / 138 / 119 / 10$ $\begin{array}{lllllll}199 & 113 & 4 / 3 & 5 / 3 & 6 / 2 & 7 / 1 & 7 / 31\end{array} 8 / 29$ $2001124 / 22 \quad 5 / 226 / 20 \quad 7 / 20 \quad 8 / 18 \quad 9 / 17$
$\begin{array}{lllllll}201 & 111 & 4 / 11 & 5 / 10 & 6 / 9 & 7 / 9 & 8 / 8\end{array} \quad 9 / 7$ $2021103 / 314 / 305 / 296 / 28 \quad 7 / 28 \quad 8 / 27$
 $\begin{array}{lllllll}204 & 108 & 4 / 8 & 5 / 8 & 6 / 6 & 7 / 6 & 8 / 5\end{array} 9 / 3$ $2051073 / 294 / 275 / 27 \quad 6 / 25 \quad 7 / 25 \quad 8 / 24$
$\begin{array}{lllllllll}10 / 17 & 11 / 15 & 12 / 15 & 130 & 1 / 13 & 2 / 12 & 3 / 13\end{array}$ $\begin{array}{lllllll}10 / 6 & 11 / 5 & 12 / 4 & 129 & 1 / 3 & 2 / 1 & 3 / 2\end{array}$
 $\begin{array}{lllllll}10 / 13 & 11 / 12 & 12 / 12 & 127 & 1 / 10 & 2 / 8 & 3 / 10\end{array}$ $\begin{array}{llllllllllll}10 / 3 & 11 / 1 & 12 / 1 & 12 / 31 & 126 & 1 / 29 & 2 / 27\end{array}$
 $\begin{array}{lllllll}10 / 10 & 11 / 9 & 12 / 8 & 124 & 1 / 7 & 2 / 5 & 3 / 7\end{array}$ $\begin{array}{lllllllllllll}9 / 28 & 10 / 28 & 11 / 27 & 12 / 26 & 123 & 1 / 25 & 2 / 24\end{array}$ $\begin{array}{lllllll}10 / 8 & 11 / 6 & 12 / 6 & 121 & 1 / 4 & 2 / 3 & 3 / 3\end{array}$

10/15 $11 / 1412 / 13119 \quad 1 / 11 \quad 2 / 10 \quad 3 / 11$
$\begin{array}{llllllll}10 / 4 & 11 / 3 & 12 / 3 & 118 & 1 / 1 & 1 / 30 & 3 / 1\end{array}$
 $\begin{array}{lllllllll}10 / 11 & 11 / 10 & 12 / 10 & 116 & 1 / 8 & 2 / 6 & 3 / 8\end{array}$

| $10 / 1$ | $10 / 31$ | $11 / 29$ | $12 / 29$ | 115 | $1 / 27$ | $2 / 25$ |  |
| :---: | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| $9 / 21$ | $10 / 20$ | $11 / 19$ | $12 / 18$ | 114 | $1 / 16$ | $2 / 15$ | $3 / 16$ |
| $10 / 9$ | $11 / 8$ | $12 / 7$ | 113 | $1 / 6$ | $2 / 4$ | $3 / 5$ |  |
| $9 / 28$ | $10 / 27$ | $11 / 26$ | $12 / 25$ | 112 | $1 / 24$ | $2 / 22$ | $3 / 24$ |
| $10 / 17$ | $11 / 15$ | $12 / 14$ | 111 | $1 / 12$ | $2 / 11$ | $3 / 12$ |  |

$\begin{array}{lllllll}10 / 6 & 11 / 5 & 12 / 4 & 110 & 1 / 2 & 2 / 1 & 3 / 2\end{array}$

$\begin{array}{lllllll}10 / 13 & 11 / 12 & 12 / 11 & 108 & 1 / 10 & 2 / 8 & 3 / 10\end{array}$
$\begin{array}{llllllllll}10 / 3 & 11 / 1 & 12 / 1 & 12 / 30 & 107 & 1 / 29 & 2 / 27\end{array}$

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## SELEUCID ERA

## Year 206 Seleucid era $=$ year 142 Arsacid era

|  | Yar | Nıв | Ais | Sm | Duz | Abo | Uuv | U II | Tas | ars | Kıs |  | Ter |  | Sha | Add |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 206 | 106 | 4/17 | 5/16 | 6/15 | 7/14 | 8/13 | 9/11 |  | 10/11 | 11/10 | 12/9 | 105 | 1/8 |  | 2/6 | 3/6 |  |
| 207 | 105 | 4/5 | 5/4 | 6/3 | 7/3 | 8/1 | 8/31 |  | 9/29 | 10/29 | 11/27 |  | 12/27 |  | 1/25 | 2/24 |  |
| 208 | 104 | 3/25 | 4/24 | 5/23 | 6/22 | $7 / 21$ | 8/20 | 9/18 | 10/17 | 11/16 | 12/15 | 103 | 1/14 |  | 2/12 | 3/14 |  |
| 209 | 103 | 4/13 | 5/12 | 6/11 | 7/10 | 8/9 | 9/8 |  | 10/7 | 11/6 | 12/5 | 102 | 1/4 |  |  | $3 / 3$ |  |
| 0 | 102 | 4/2 | 5/1 | 5/31 | 6/29 | 7/29 | 8/28 |  | 9/27 | 10/26 | 11/25 |  | 12/2 | 101 | 1/23 | /2 |  |

$\begin{array}{llllllllllll} & 211 & 101 & 4 / 20 & 5 / 20 & 6 / 18 & 7 / 18 & 8 / 17 & 9 / 15\end{array}$
$\begin{array}{llllllll}212 & 100 & 4 / 9 & 5 / 9 & 6 / 8 & 7 / 7 & 8 / 6 & 9 / 5\end{array}$
$\begin{array}{llllllllllll}213 & 99 & 3 / 30 & 4 / 29 & 5 / 28 & 6 / 27 & 7 / 26 & 8 / 25\end{array}$
$\begin{array}{llllllllll}214 & 98 & 4 / 18 & 5 / 17 & 6 / 16 & 7 / 16 & 8 / 14 & 9 / 13\end{array}$
$\begin{array}{llllllll}215 & 97 & 4 / 6 & 5 / 6 & 6 / 4 & 7 / 4 & 8 / 3 & 9 / 1\end{array}$
$216 \quad 96 \quad 3 / 27 \quad 4 / 25 \quad 5 / 25 \quad 6 / 23 \quad 7 / 238 / 22$
$\begin{array}{llllllll}217 & 95 & 4 / 14 & 5 / 14 & 6 / 13 & 7 / 12 & 8 / 11 & 9 / 9\end{array}$
$\begin{array}{llllllll}218 & 94 & 4 / 3 & 5 / 3 & 6 / 2 & 7 / 1 & 7 / 31 & 8 / 30\end{array}$
$\begin{array}{lllllllll}219 & 93 & 4 / 21 & 5 / 21 & 6 / 20 & 7 / 19 & 8 / 18 & 9 / 17\end{array}$
$\begin{array}{lllllll}220 & 92 & 4 / 11 & 5 / 10 & 6 / 9 & 7 / 8 & 8 / 7 \\ 9 / 6\end{array}$
$\begin{array}{lllllllll}221 & 91 & 3 / 31 & 4 / 30 & 5 / 30 & 6 / 28 & 7 / 28 & 8 / 27\end{array}$
$\begin{array}{lllllllllll}222 & 90 & 4 / 19 & 5 / 19 & 6 / 18 & 7 / 17 & 8 / 16 & 9 / 15\end{array}$
$\begin{array}{llllllll}223 & 89 & 4 / 8 & .5 / 7 & 6 / 6 & 7 / 6 & 8 / 4 & 9 / 3\end{array}$
$\begin{array}{lllllllllllll}224 & 88 & 3 / 28 & 4 / 27 & 5 / 26 & 6 / 25 & 7 / 25 & 8 / 23\end{array}$

$\begin{array}{llllllll}226 & 86 & 4 / 5 & 5 / 5 & 6 / 4 & 7 / 3 & 8 / 2 & 9 / 1\end{array}$
$\begin{array}{llllllllll}227 & 85 & 3 / 24 & 4 / 23 & 5 / 23 & 6 / 21 & 7 / 21 & 8 / 20 & 9 / 18\end{array}$
$\begin{array}{lllllll}228 & 84 & 4 / 12 & 5 / 12 & 6 / 11 & 7 / 10 & 8 / 9\end{array} \quad 9 / 8$
229. $83 \quad 4 / 2 \quad 5 / 2 \quad 5 / 31 \quad 6 / 30 \quad 7 / 30 \quad 8 / 28$
$\begin{array}{llllllllllllllll}230 & 82 & 4 / 21 & 5 / 21 & 6 / 19 & 7 / 19 & 8 / 17 & 9 / 16\end{array}$
$\begin{array}{llllllll}231 & 81 & 4 / 9 & 5 / 9 & 6 / 7 & 7 / 7 & 8 / 6 & 9 / 4\end{array}$
$\begin{array}{lllllll}232 & 80 & 3 / 30 & 4 / 28 & 5 / 28 & 6 / 26 & 7 / 26 \\ 8 / 25\end{array}$


| 234 | 78 | $4 / 7$ | $5 / 7$ | $6 / 5$ | $7 / 4$ | $8 / 3$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | $9 / 2$ |  |  |  |  |  |

$\begin{array}{llllllllll}235 & 77 & 3 / 26 & 4 / 25 & 5 / 24 & 6 / 23 & 7 / 23 & 8 / 21\end{array}$

| 10/15 | 11/13 | 12/13 | 100 | 1/11 |  | 2/10 | $3 / 11$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10/4 | 11/3 | 12/2 | 99 | 1/1 |  | $1 / 3$ | 2/28 |
| 9/24 | 10/23 | 11/22 |  | 12/21 | 98 | 1/19 | 2/1 |
| 10/12 | 11/11 | 12/10 | 97 | 1/9 |  | $2 / 7$ | 3/8 |
| 10/1 | 10/30 | 11/29 |  | 12/28 | 96 | 1/27 | 2/25 |
| 9/20 | 10/20 | 11/18 |  | 12/18 | 95 | 1/16 | 2/15 |
| 10/9 | 11/7 | 12/6 | 94 | 1/5 |  | 2/3 | 3/5 |
| 9/28 | 10/28 | 11/26 |  | 12/26 | 98 | 1/24 | 2/23 |
| 10/16 | 11/15 | 12/14 | 92 | 1/13 |  | 2/11 | 3/12 |
| 10/6 | 11/4 | 12/4 | 91 | $1 / 2$ |  | 1/31 | $3 / 2$ |


| $9 / 25$ | $10 / 25$ | $11 / 23$ |  | $12 / 23$ | 90 | $1 / 21$ | $2 / 19$ | $3 / 21$ |
| :---: | :--- | :--- | :--- | :---: | :--- | :--- | :--- | :--- |
| $10 / 14$ | $11 / 13$ | $12 / 12$ | 89 | $1 / 10$ | $2 / 9$ | $3 / 9$ |  |  |
| $10 / 2$ | $11 / 1$ | $11 / 30$ |  | $12 / 30$ | 88 | $1 / 28$ | $2 / 27$ |  |
| $9 / 22$ | $10 / 21$ | $11 / 20$ |  | $12 / 19$ | 87 | $1 / 18$ | $2 / 16$ | $3 / 18$ |
| $10 / 11$ | $11 / 9$ | $12 / 9$ | 86 | $1 / 7$ |  | $2 / 5$ | $3 / 7$ |  |
|  |  |  |  |  |  |  |  |  |
| $9 / 30$ | $10 / 30$ | $11 / 28$ |  | $12 / 27$ | 85 | $1 / 26$ | $2 / 24$ |  |
| $10 / 18$ | $11 / 16$ | $12 / 16$ | 84 | $1 / 14$ | $2 / 13$ | $3 / 14$ |  |  |
| $10 / 7$ | $11 / 6$ | $12 / 5$ | 83 | $1 / 4$ |  | $2 / 2$ | $3 / 4$ |  |
| $9 / 27$ | $10 / 26$ | $11 / 25$ |  | $12 / 24$ | 82 | $1 / 22$ | $2 / 21$ | $3 / 23$ |
| $10 / 16$ | $11 / 14$ | $12 / 14$ | 81 | $1 / 12$ |  | $2 / 10$ | $3 / 11$ |  |

$\begin{array}{lllllll}10 / 4 & 11 / 2 & 12 / 2 & 12 / 31 & 80 & 1 / 30 & 2 / 28\end{array}$
$\begin{array}{lllllllll}9 / 23 & 10 / 23 & 11 / 21 & 12 / 21 & 79 & 1 / 19 & 2 / 18 & 3 / 19\end{array}$
$\begin{array}{llllll}10 / 12 & 11 / 11 & 12 / 10 & 78 & 1 / 9 & 2 / 7 \\ 3 / 9\end{array}$
$\begin{array}{lllllll}10 / 1 & 10 / 31 & 11 / 29 & 12 / 28 & 77 & 1 / 27 & 2 / 25\end{array}$
$\begin{array}{lllllllllll}9 / 20 & 10 / 19 & 11 / 18 & 12 / 17 & 76 & 1 / 15 & 2 / 14 & 3 / 15\end{array}$

## SELEUCID ERA

Year 236 Seleucid era = year 172 Arsacid era

$\begin{array}{llllllllllllll}246 & 66 & 3 / 25 & 4 / 23 & 5 / 23 & 6 / 22 & 7 / 21 & 8 / 20 & 9 / 18 & 10 / 18 & 11 / 16 & 12 / 16 & 65 & 1 / 14\end{array} \quad 2 / 13 ~ 3 / 13$
$\begin{array}{lllllllllllll}247 & 65 & 4 / 12 & 5 / 11 & 6 / 10 & 7 / 9 & 8 / 8 & 9 / 7 & & 10 / 6 & 11 / 5 & 12 / 4 & 64 \\ 1 / 3 & 2 / 1 & 3 / 3\end{array}$
$\begin{array}{llllllll}248 & 64 & 4 / 2 & 5 / 1 & 5 / 30 & 6 / 29 & 7 / 28 & 8 / 27\end{array}$
$\begin{array}{llllllllllll}249 & 63 & 4 / 21 & 5 / 20 & 6 / 18 & 7 / 18 & 8 / 16 & 9 / 15\end{array}$
$\begin{array}{lllllll}250 & 62 & 4 / 10 & 5 / 10 & 6 / 8 & 7 / 7 & 8 / 6\end{array} \quad 9 / 4$
$\begin{array}{lllllllllll}9 / 26 & 10 / 25 & 11 / 24 & 12 / 24 & 63 & 1 / 22 & 2 / 21 & 3 / 22\end{array}$
$\begin{array}{lllllll}10 / 14 & 11 / 13 & 12 / 13 & 62 & 1 / 12 & 2 / 10 & 3 / 12\end{array}$
$\begin{array}{llllllll}10 / 4 & 11 / 2 & 12 / 2 & 12 / 31 & 61 & 1 / 30 & 2 / 28\end{array}$
$251 \quad 613 / 294 / 27 \quad 5 / 276 / 25 \quad 7 / 25 \quad 8 / 23$

| $9 / 22$ | $10 / 22$ | $11 / 20$ |  | $12 / 20$ | 60 | $1 / 18$ | $2 / 16$ |
| :---: | :--- | :--- | :---: | :---: | :--- | :--- | :--- |
| $3 / 18$ |  |  |  |  |  |  |  |
| $10 / 11$ | $11 / 10$ | $12 / 9$ | 59 | $1 / 8$ | $2 / 6$ | $3 / 8$ |  |
| $10 / 1$ | $10 / 30$ | $11 / 28$ |  | $12 / 28$ | 58 | $1 / 26$ | $2 / 25$ |
| $9 / 20$ | $10 / 19$ | $11 / 18$ |  | $12 / 17$ | 57 | $1 / 16$ | $2 / 14$ |
| $10 / 15$ |  |  |  |  |  |  |  |
| $10 / 8$ | $11 / 6$ | $12 / 6$ | 56 | $1 / 4$ |  | $2 / 3$ | $3 / 4$ |


$\begin{array}{lllllll}253 & 59 & 4 / 7 & 5 / 6 & 6 / 4 & 7 / 4 & 8 / 2\end{array} \quad 9 / 1$
$\begin{array}{lllllll}10 / 1 & 10 / 30 & 11 / 28 & 12 / 28 & 58 & 1 / 26 & 2 / 25\end{array}$
$\begin{array}{lllllllllll}254 & 58 & 3 / 26 & 4 / 25 & 5 / 24 & 6 / 23 & 7 / 23 & 8 / 21\end{array}$

$\begin{array}{llllllll}256 & 56 & 4 / 3 & 5 / 2 & 6 / 1 & 6 / 30 & 7 / 30 & 8 / 28\end{array}$
9/27 10/26 11/25
$\begin{array}{lllll}12 / 25 & 55 & 1 / 23 & 2 / 22 & 3 / 24\end{array}$
$\begin{array}{lllllllllllllllll}257 & 55 & 4 / 22 & 5 / 21 & 6 / 20 & 7 / 19 & 8 / 16\end{array}$
$\begin{array}{llllllll}258 & 54 & 4 / 12 & 5 / 11 & 6 / 9 & 7 / 9 & 8 / 7 & 9 / 6\end{array}$
$259 \quad 533 / 314 / 305 / 29 \quad 6 / 27 \quad 7 / 278 / 25$
$\begin{array}{lllllll}260 & 52 & 4 / 19 & 5 / 18 & 6 / 16 & 7 / 16 & 8 / 14 \\ 9 / 13\end{array}$
$\begin{array}{lllllll}10 / 16 & 11 / 15 & 12 / 14 & 54 & 1 / 13 & 2 / 12 & 3 / 13\end{array}$
$\begin{array}{lllllll}10 / 5 & 11 / 4 & 12 / 3 & 53 & 1 / 2 & 2 / 1 & 3 / 1\end{array}$
$\begin{array}{llllllllll}9 / 24 & 10 / 23 & 11 / 22 & 12 / 21 & 52 & 1 / 20 & 2 / 19 & 3 / 20\end{array}$
$\begin{array}{lllllll}10 / 13 & 11 / 11 & 12 / 11 & 51 & 1 / 9 & 2 / 8 & 3 / 9\end{array}$
$\begin{array}{lllllll}261 & 51 & 4 / 8 & 5 / 8 & 6 / 6 & 7 / 5 & 8 / 4 \\ 9 / 2\end{array}$
$\begin{array}{lllllll}10 / 2 & 11 / 1 & 11 / 30 & 12 / 30 & 50 & 1 / 28 & 2 / 26\end{array}$
$262503 / 284 / 265 / 26 \quad 6 / 25 \quad 7 / 24 \quad 8 / 23$

$\begin{array}{llllllllllll}9 / 21 & 10 / 21 & 11 / 19 & 12 / 19 & 49 & 1 / 17 & 2 / 16 & 3 / 16\end{array}$
$\begin{array}{lllllll}10 / 9 & 11 / 8 & 12 / 7 & 48 & 1 / 6 & 2 / 4 & 3 / 6\end{array}$
$\begin{array}{llllllllllllll}264 & 48 & 4 / 4 & 5 / 4 & 6 / 2 & 7 / 2 & 7 / 31 & 8 / 30 & 9 / 29 & 10 / 28 & 11 / 27 & 12 / 27 & 47 & 1 / 25 \\ 2 / 24\end{array}$
$\begin{array}{llllllllllllll}265 & 47 & 3 / 25 & 4 / 23 & 5 / 23 & 6 / 21 & 7 / 21 & 8 / 19 & 9 / 18 & 10 / 18 & 11 / 16 & 12 / 16 & 46 & 1 / 15\end{array} \quad 2 / 133 / 15$

## SELEUCID ERA

Year 266 Seleucid era = year 202 Arsacid era

|  | ${ }_{\text {yar }}^{\text {b.c. }}$ Nre | Ais | Stm | Duz | Abu | Ulu | U II |  | Ars | Kis |  | Teb |  | Sha |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 266 | 46 4/13 | 5/12 | 6/11 | 7/10 | 8/9 | 9/7 |  | 10/7 | 11/6 | 12/5 | 45 | 1/4 |  | 2/3 | $3 / 3$ |  |
| 267 | $454 / 2$ | $5 / 1$ | 5/30 | 6/29 | 7/28 | 8/27 |  | 9/25 | 10/25 | 11/23 |  | 12/23 | 44 | 1/21 | 2/20 | 3/21 |
| 268 | 44 4/20 | 5/19 | 6/18 | 7/17 | 8/16 | 9/15 |  | 10/14 | 11/13 | 12/12 | 43 | 1/11 |  | 2/9 | $3 / 11$ |  |
| 269 | 43 4/10 | 5/9 | $6 / 7$ | 7/7 | 8/5 | 9/4 |  | 10/4 | 11/2 | 12/2 |  | 12/31 | 42 | 1/29 | 2/28 |  |
| 270 | $423 / 30$ | 4/28 | 5/27 | 6/26 | 7/26 | $8 / 24$ |  | $9 / 23$ | 10/22 | 11/21 |  | 12/20 | 41 | 1/19 | 2/17 | 3/18 |
| 271 | 41 4/16 | 5/16 | 6/15 | 7/14 | 8/13 | 9/11 |  | 10/11 | 11/9 | 12/9 | 40 | 1/7 |  | 2/5 | $3 / 7$ |  |
| 272 | $404 / 6$ | 5/5 | 6/4 | 7/3 | 8/2 | $9 / 1$ |  | 9/30 | 10/30 | 11/28 |  | 12/28 | 39 | 1/26 | 2/24 |  |
| 273 | 39 3/26 | 4/25 | 5/24 | 6/23 | 7/22 | 8/21 |  | 9/20 | 10/19 | 11/18 |  | 12/17 | 38 | 1/15 | 2/1 | 3/15 |
| 274 | $384 / 14$ | 5/13 | 6/12 | 7/12 | 8/10 | 9/9 |  | 10/8 | 11/7 | 12/6 | 37 | 1/5 |  | $2 / 3$ | $3 / 4$ |  |
| 275 | $374 / 3$ | 5/2 | 6/1 | 6/30 | 7/30 | 8/28 |  | $9 / 27$ | 10/26 | 11/25 |  | 12/24 | 36 | 1/23 | 2/21 | 3/23 |
| 276 | 36 4/22 | 5/21 | 6/19 | 7/19 | 8/17 | 9/16 |  | 10/16 | 11/14 | 12/14 | 35 | 1/12 |  | 2/11 | 3/12 |  |
| 277 | $354 / 11$ | 5/10 | 6/9 | 7/8 | 8/7 | 9/6 |  | 10/5 | 11/4 | 12/3 | 34 | 1/2 |  | 1/31 | $3 / 2$ |  |
| 278 | $344 / 1$ | 4/30 | 5/29 | 6/28 | 7/27 | 8/26 |  | 9/24 | 10/24 | 11/22 |  | 12/22 | 33 | 1/20 | 2/19 | 3/19 |
| 279 | 33 4/18 | 5/17 | 6/16 | 7/16 | 8/14 | 9/13 |  | 10/12 | 11/11 | 12/10 | 32 | 1/9 |  | 2/7 | 3/9 |  |
| 280 | $324 / 7$ | $5 / 7$ | 6/5. | 7/5 | 8/4 | $9 / 2$ |  | 10/2 | 10/31 | 11/30 |  | 12/29 | 31 | 1/28 | 2/26 |  |
| 281 | $313 / 28$ | 4/26 | 5/26 | 6/24 | 7/2 | 8/23 |  | 9/21 | 10/21 | 11/19 |  | 12/19 | 30 | 1/17 | 2/16 | /17 |
| 282 | $304 / 16$ | 5/15 | 6/14 | 7/13 | 8/12 | 9/10 |  | 10/10 | 11/9 | 12/8 | 29 | 1/7 |  | 2/5 | $3 / 5$ |  |
| 283 | 29 4/4 | $5 / 3$ | 6/2 | 7/2 | 7/31 | 8/30 |  | 9/28 | 10/28 | 11/27 |  | 12/27 | 28 | 1/25 | 2/24 |  |
| 284 | $283 / 25$ | 4/23 | 5/23 | 6/21 | 7/21 | 8/19 | 9/18 | 10/17 | 11/16 | 12/15 | 27 | 1/14 |  | 2/12 | 3/14 |  |
| 285 | 27 4/13 | 5/12 | 6/10 | 7/10 | 8/8 | 9/7 |  | 10/7 | 11/5 | 12/5 | 26 | $1 / 3$ |  | 2/2 | $3 / 4$ |  |
| 286 | $264 / 2$ | 5/2 | 5/31 | 6/29 | 7/29 | 8/27 |  | 9/26 | 10/25 | 11/24 |  | 12/23 | 25 | 1/22 | 2/21 | 3/21 |
| 287 | $254 / 20$ | $5 / 20$ | 6/18 | 7/17 | 8/16 | 9/14 |  | 10/14 | 11/12 | 12/12 | 24 | 1/10 |  | 2/9 | 3/10 |  |
| 288 | 24 4/9 | 5/8 | 6/7 | 7/7 | 8/5 | 9/4 |  | 10/3 | 11/2 | 12/1 |  | 12/31 | 23 | 1/29 | 2/27 |  |
| 289 | 23 3/29 | 4/28 | 5/27 | 6/26 | 7/25 | 8/24 |  | 9/23 | 10/22 | 11/21 |  | 12/20 | 22 | 1/18 | 2/17 | 3/18 |
| 290 | 22 4/17 | 5/16 6 | 6/15 | 7/15 | 8/13 | 9/12 |  | 10/11 | 11/10 | 12/9 | 21 | $1 / 8$ |  | 2/6 | $3 / 7$ |  |
| 291 | $214 / 5$ | 5/5 | 6/3 | 7/3 | 8/2 | 8/31 |  | 9/30 | 10/29 | 11/28 |  | 12/27 | 20 | 1/26 | 2/24 |  |
| 292 | $203 / 26$ | 4/24 5 | 5/24 | 6/22 | 7/22 | 8/21 |  | 9/19 | 10/19 | $11 / 17$ |  | 12/17 | 19 | 1/15 | 2/14 | 3/15 |
| 293 | 19 4/14 | $5 / 136$ | 6/12 | 7/11 | 8/10 | 9/9 |  | 10/8 | 11/7 | 12/6 | 18 | $1 / 5$ |  | 2/3 | 3/5 |  |
| 294 | 18 4/4 | $5 / 3 \quad 6$ | 6/1 | 7/1 | 7/30 | 8/29 |  | 9/27 | 10/27 | 11/25 |  | 12/25 | 17 | 1/24 | 2/22 | 3/23 |
| 295 | $174 / 22$ | 5/21 6 | 6/20 | 7/19 | 8/17 | 9/16 |  | 10/15 | 11/14 | 12/13 | 16 | 1/12 |  | 2/10 | 3/12 |  |

## SELEUCID ERA

## Year 296 Seleucid era $=$ year 232 Arsacid era



## SELEUCID ERA

Year 327 Seleucid era = year 263 Arsacid era



[^0]:    ${ }^{1}$ Against recognition of nineteen-year cycles at that time see Kugler, SSB II 362-71 and 422-30. We have followed Sidersky (ECAB, p. 38) in taking 747 b.c. as a convenient starting-point for our scheme in Plate I, but that is not to be interpreted as unqualified acceptance of that date as the point at which Babylonian astronomers consciously recognized the principle that seven intercalations were regularly needed in each nineteen years. There can be no question, however, that the early known intercalations, when placed in the nineteen-year framework, fit to a considerable extent into the standard pattern of the cycle as later established. Since such correspondence cannot be wholly accidental, it forms the basis for our assumption of an early recognition of the nineteen-year period, which, however, still lacked a standard scheme of intercalation. Political disturbances and conscious experimentation each played a part in producing the early irregularities.

[^1]:    ${ }^{3}$ Yale University, The Excavations at Dura-Europus . . . Seventh and Eighth Seasons . . . , ed. by M. I. Rostovtzeff, F. E. Brown, and C. B. Welles (New Haven, 1939) Pl. XXXVII and pp. 307-9.

[^2]:    ${ }^{4}$ R. H. McDowell, Coins from Seleucia on the Tigris (Ann Arbor, 1935) pp. 147-53.
    ${ }^{5}$ A. T. Olmstead, "The chronology of Jesus' life," Anglican Theological Review XXIV (1942) 3 f.
    ${ }^{6}$ Kugler, SSB II 334 f. and 411-22; Sidersky, ECAB, pp. 29-33; cf. also F. H. Weissbach in Hilprecht Anniversary Volume (1909) pp. 281-90.

[^3]:    ${ }^{1}$ Schoch (op. cit. p. 98) is wrong when he states that three successive months of twentynine days are impossible and infers that the same is true of more than three thirty-day months. Cf. Johann Schaumberger in SSB, Ergänzungsheft 3 (1935) p. 255.

[^4]:    2 For the Old'Persian and Achaemenid Elamite correlations cf. Poebel in AJSL LV (1938) 139.

