



CODE 166	CODE 196	CODE 228	CODE 243	CODE 251	CODE 294
CODE 427	CODE 490	CODE 590	CODE 666	CODE 01010	CODE 1260
CODE1447	CODE 1900	CODE 1975	CODE 2300	CODE 6000	CODE 144000

CODE 228

Key to the Original Time Code

by Floyd R. Cox (Revised 12-21-15)



It is well known that, in order for Simon Bar Kochba to inspire three million Jews to revolt against the Roman “occupiers” in 132 AD, the priests and rabbis had to prove that the fall of 132 AD was going to be a Jubilee year, when they were supposed to return to the land Joshua had given their ancestors.

To accomplish this task, they had to delete 166 years of Persian history (during the second temple) and to reduce the time between Adam and the exodus 62 years (2448th year instead of 2510th year after Adam).

Total reductions were 228 years (166 + 62 = 228).

They had to preserve Creation as 3761-3760 BC because their 19-year and Sabbatical cycles were calculated from that beginning. 37 BC was a sabbatical and the 19th year counting from 3761 BC.

And the 19-year cycle needed to be corrected one day every 228 years.

Therefore, by adding 228 years before the Solomon’s temple (2989 – 228 = 2510) and by subtracting 228 years after Solomon’s temple, the rabbis could maintain their date of Creation as 3761/60 BC. How was this done?

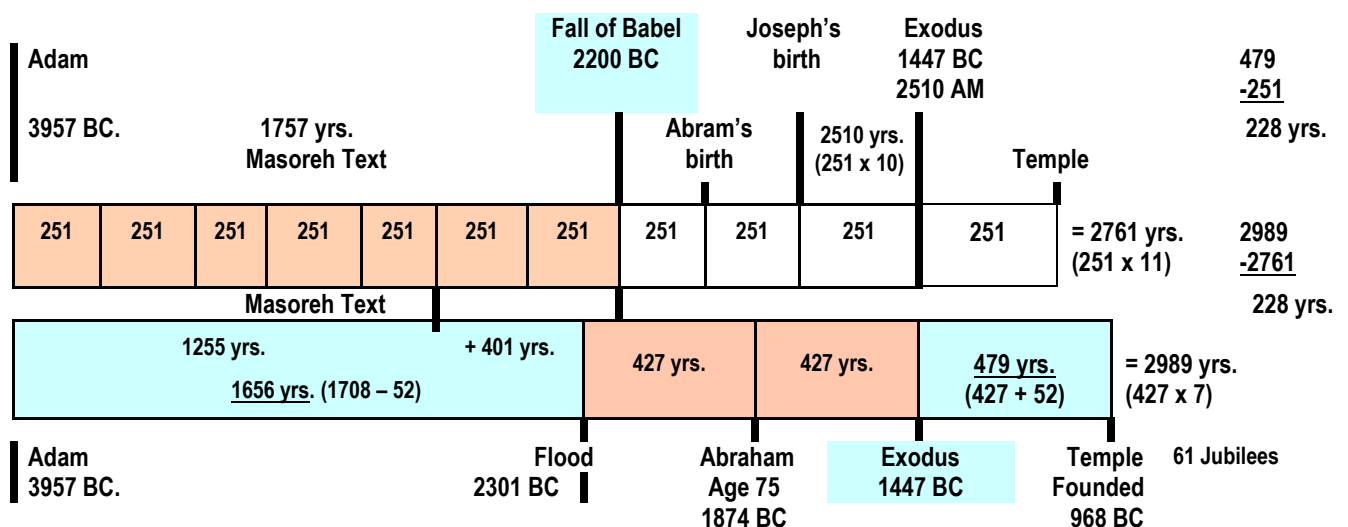
Here is a hint #1: If there had allegedly been 251 years between the exodus and the temple, and, if they changed it to 479 years, this would add 228 years (251 + 228 = 479).

Hint #2: The rabbinical date of Solomon’s temple is 832 BC, 166 years after 998 BC. The actual date for the temple is likely 968 BC because the kings of Israel overlapped 30 years instead of being consecutive.

Hint #3: During the Judges, the oppressions lasted 111 years, and the judges ruled 339 years (111 years + 228 years of Judges = 339) (or 111 + 339 = 450 as in Acts 13:20). 339 years allow 479 years from the exodus to the temple as in I Kings 6:1).

Is the 251 years from the exodus to the temple credible? Yes, if we can recognize the pattern. As Archbishop Ussher said, there were 1757 years (251 x 7) from Adam to the fall of Babel, 2008 years (251 x 8) from Adam to Abraham, and 2259 years (251 x 9) from Adam to Joseph. If there were 2761 years (251 x 11), this would differ 228 years from choosing 2989 years (427 x 7), as in TABLE 1.

TABLE 1. The 427-year and 251-year Patterns to the Temple (3957 - 968 BC)



RELATED TOPICS:

Jubilee of 2022 AD

Ussher was not aware there were allegedly 2510 years (251 x 10) from Adam to the exodus and 2761 years (251 times 11) or 2989 years (427 times 7) from Adam to the temple, a difference of 228 years. (Also, 251 + 228 = 479).

Another pattern is 2989 years (427 x 7) from Adam to the temple. This is 228 years longer than the 2761 years (2989 – 2761 = 228) as in TABLE 2.

TABLE 2. Three Basic Systems of Chronology From Joshua to Samuel

Epoch	111-yr. System	339-yr. System	450-yr. System	
OPPRESSIONS				
Cushan	8		8	
Moabites	18		18	
Jabin	20		20	
Midianites	7		7	
Ammonites	18		18	
Philistines	40		40	
	111		111	
JUDGES				
Othniel		40 rest	40	
Ehud		80 rest	80	
Shamgar		0 rest	0	
Deborah		40 rest	40	111
Gideon		40 rest	40	339
Abimelech		3 reign	3	450
Tola		23 reign	23	Acts 13:20
Jair		22 reign	22	
Jephthah		6 reign	6	
Ibsan		7 reign	7	
Elon		10 reign	10	
Abdon		8 reign	8	
Samson		20	20	Judges 16:31
Eli		40	40	I Sam. 4:18
	111	339	450 ¹	

339 - 111 = 228
 251 x 11 = 2989
 427 x 7 = 2761
 228

The 450 year system was supported by Acts 13:20 and by the Greek Jews of Alexandria. The 339 year system is supported by I Kings 6:1 and is found in the chronography of Archbishop Ussher. The 111-year system is more compatible with recent views that the exodus was about 40 years before Pharaoh Merneptah, son of Ramesses II.

Proof that these changes were made is found in BC dates. The temple was in 968 BC, but the rabbinical date is 136 years later, in 832 BC. The difference would have been 166 instead of 136 years if the kings of Israel had not overlapped 30 years. The exodus was likely in 1448 BC, but the rabbinical date is 136 years later, in 1312 BC.

The priests and rabbis could not alter the Persian period from Cyrus to Darius, because the second temple was built during that time, during Ezra, Nehemiah and Esther.

They could not alter the dates after Alexander conquered Persia in 331 BC, because rabbis used the Babylonian Talmud to date their documents, land deeds, contracts and accounting based upon the year of the Greek era of Seleucid, after the spring of 311 BC, and a sabbatical was in the second year of Seleucid, in 310 BC, 6 jubilees after the first year of Nebuchadnezzar in 604 BC.

Sabbatical and Jubilee Cycles

They knew that Herod had captured Jerusalem in a Sabbatical year, in 37 BC, which is 196 19-year cycles after Creation allegedly in 3761-60 BC. This period would be equal to 19 196-year cycles, which are equal to four Jubilees times 19 (196 x 19 = 3724 years) (3761 BC – 3724 years = 37 BC).

251 and 427-year Cycles

They may have known the 251-year Venus cycle and the 427-year Jupiter cycle. If so, some were

¹ The 450-year system is supported by Acts 13:19-20: "...he divided their land by lot. And after that he gave unto them judges about the space of 450 years, until Samuel the prophet." Africanus and Jewish scholars of Alexandria supported this view. They believed the exodus was when the Hyksos dynasty was ousted from Egypt in about 1558 BC.

The 339 years are supported by First Kings 6:1. This view has been preserved by Ussher's chronology inserted in the early King James Version and by the Jewish rabbinic society.

The 111 years are supported by the 251-year pattern. Kenneth Kitchen and Jack Finegan believe the exodus was about 282 to 294 years before the temple was founded in Solomon's fourth year. This would be about 251 years before David brought the Ark into Jerusalem in 1004 BC. This is also supported by Ruth 4:20-22; I Chronicles 2:10-15, and Matthew 1:4-6, where Nashon is the Prince of Judah at the exodus, only six generations before David (Mat. 1:17). Furthermore, the grandsons of Aaron and Moses were alive at the end of the Book of Judges.

- The Last Jubilee
- Date of Creation
- Missing Dimension of Hebrew Calendar
- Age of the Universe
- 6,000-Year Jubilee Calendar
- Accurate Lunar Solar Calendar
- Sundials
- Rabbi Code
- Samaritan Code
- Hebrew Roots Myopia
- Hidden Feast Code
- The Third Temple Code
- Myths
- Power Point Sabbaticals-1
- Sabbaticals-2
- Sabbaticals-3
- Sabbaticals-4
- Duality
- Kings
- Books
- Letters
- Summary Code 490
- Summary Code 251
- Exodus
- Genetics
- Y-DNA
- Littleberry Cox

likely to date the first temple as 251 times 11 after Adam ($11 \times 251 = 2761$ years). Others likely preferred to date the first temple as 427 times 7 after Adam ($7 \times 427 = 2989$ years). These two views differ by 228 years ($2989 - 2761 = 228$ years).

It is very likely they knew these two cycles because Abraham was born 2008 years (251×8) after Adam. The priests and rabbis reduced it 60 years to 1948 years ($2008 - 60 = 1948$).

In the Samaritan text, Abraham was born 251 years later, 2259 years (251×9) after Adam, that is, if we restore the missing 60 years between Abraham and his father. The result is that the Samaritans added 251 years ($2008 + 251 = 2259$).

Babel fell 1757 years (251×7) after Adam. However, in the Samaritan text, Babel fell 49 years earlier, that is, 1708 years (427×4) after Adam. The pre-flood 1656 years plus 52 years equal 427 times four. The post-exodus 479 years minus 52 years equal 427. This confirms the 427-year pattern to the temple.

If one view from Adam to the temple has 2761 years (251×11), and a second version has 2989 years (427×7), these two views would differ by 228 years. This is the same difference as between 479 and 251. This helps explain how the priests and rabbis, in 132 AD, reduced the Persian period 166 years and subtracted 62 years between Adam and the exodus from Egypt. ($166 + 62 = 228$).

If sabbaticals began with Adam in 3957 BC, there would be a sabbatical in 1757 years (251×7) at the fall of Babel, and one in 2989 years (427×7) at the founding of the temple in 968 BC.

However, if sabbaticals began when Joshua crossed the Jordan river into Canaan as instructed by Moses (Leviticus 25:2), then a sabbatical would be 441 years later, in 966 BC. The Samaritans also began counting when Joshua crossed the Jordan.

1407 BC (40 years after the exodus) would align with a sabbatical 441 (7×63) (49×9) years later, in 966 BC, even though the temple was founded 439 years after 1407 (I Kings 6:1), and sabbaticals likely followed in 588 (at the fall of Jerusalem, Jer 34) and 539 BC (at the fall of Babylon). In contrast, the Rabbinic view says Jerusalem fell in 422 BC, 166 years after 588, that is, 490 years before 70 AD, at the end of 70 sabbatical years (Dan 9:25).

14-Year Delay for Jubilee Years

They believed their Bar Kochba revolt against the Roman occupiers was 49 years after 83 AD, which was 14 years after Jerusalem fell in 70 AD (sabbatical allegedly began in the fall of 69 AD). 132 AD was allegedly a jubilee, 49 years after the last Jubilee in 83 AD, which was 14 years after the second temple was burned in 69-70 AD, at the end of a Sabbatical.

However, they claimed the second temple burned in 69-70 AD, 490 years (70 weeks of years) after the first temple was burned in 422-421 BC, at the end of a Sabbatical year, and that a Jubilee was 14 years after this Sabbatical, in 408/407 BC. This was supported by the assertion that Joshua crossed the Jordan in 1272 BC, 17 Jubilees (850 years) before the first temple burned in 422-21 BC, and the Jubilee cycle allegedly began 14 years later, in 1258 BC, that is, 17 Jubilees before the Jubilee of 408-407 BC.

This idea comes from Ezekiel 40:1, where Ezekiel was shown a vision of the restored temple. The vision was 14 years after the fall of Jerusalem, on the 10th day (perhaps on Atonement) at the beginning of the year, allegedly at the beginning of a Jubilee.

Next, if Jerusalem fell at the end of a Sabbatical in 422-421 BC, then Jerusalem fell again 490 years later, at the end of a Sabbatical, in 69-70 AD, and a Jubilee would allegedly be 14 years afterwards, in 83-84 AD, 49 years (one Jubilee) before the Bar Kochba Revolt in 132-133 AD ($83 + 49 = 132$ AD).

It becomes obvious that the priests and rabbis made their changes just before 132 AD to show that Bar Kochba was the prophesied Messiah foretold in Daniel 9:25. His appearance in 132 AD was 504 years after Cyrus captured Babylon allegedly in 373 BC according to Seder Olam. A Jubilee was allegedly 14 years later, in 359 BC, 490 years before Bar Kochba ($359 + 132 = 490$ years).

480-Year Pattern

Last but not least, the priests and rabbis created a 480-year pattern. The tabernacle lasted 480 years, allegedly from 1213 to 832 BC. The first temple lasted 480 years, allegedly from 832 to 352 BC, and there were 480 years allegedly from 352 to 129 AD, just before the Bar Kochba revolt, which was aimed at restoring the second temple. Evidently, the Jews reveled in time-patterns such as these.

Problem: 235 Moons Slightly Longer than 19 Years

235 moons in 19 years are 365.2467463 times 19 (6939.6881797 days), whereas, the Gregorian calendar has, 6,939.6075 days in 19 years (365.2425 days each). The moons are .0805 days longer than 19 Gregorian years, .805 days longer in 190 years, 8.05 days longer in 1900 years and one day longer in 217 years. This means the lunar calendar needs to be delayed one day every 217 years to match the Gregorian solar calendar ($365.25 - 3/400 = 365.2425$ days). It needs to be delayed one day every 224 years to match $365.25 - 1/300$ (year with 365.246666

days), which is off only one day in 12,555 years. Evidently, these 8 days have somehow been corrected by the Hebrew calendar over the past 2,000 years, because eclipses continue to fall on new moons and full moons on the Hebrew calendar from 31 AD and 71 AD to the present time.

(<http://www.friesian.com/calendar.htm>)

Other Issues

If time goes on, some will continue to be fascinated with tracking the sabbaticals in 2001, 2008, 2015 and 2022 with the hope of finding new evidence, possibly an overlooked key, to a final fulfillment of the jubilee.

When Mohammed fled from Mecca to Medina, the Moslem calendar, the Era of *Anno Hegira*, began. This allegedly occurred in the evening, on the first day of the month of Muh. arram, or 16 July 622 AD (Julian reckoning), at the first visible crescent of the New Moon. This is 490 years after the alleged jubilee of the Bar Kochba Revolt in 132 AD ($132 + 490 = 622$). Last, but not least, it aligns with 2043 AD as a jubilee, 6,000 years after my own date of Creation in 3957 BC (<http://www.friesian.com/calendar.htm#>).

At the following link, we find the following quote about the 228 year calendar correction:

“The Gregorian year is $365 + 1/4 - 3/400 = 365.2425$ days. This is off one day in 3320 years against the seasons and one day in 220 years against the Metonic year. Exactly 12 of the 19 year cycles equals 228 years.

“If we figure a day correction after that span we get, $365 + 1/4 - 3/400 + 1/228 = 365.246886$. This is off just a day in 7161 years against the Metonic year. This is quite accurate enough for our purposes, indeed more than twice as accurate as the Gregorian year is for the Sun” (<http://www.friesian.com/calendar.htm#>).

235 moons are 1/12 of a day longer than 19 years. Therefore, a one-day correction should occur every 228 years ($19 \times 12 = 228$). This is done by changing the sequence in when the extra seven months are inserted ever 19 years after each 228-year period:

(<http://code251.com/code1900.html>).

The Colors in TABLE 2

The blue horizontal lines show the sequence in which the seven extra moons are inserted in each 19-year period, the years with 13 months. Each date represents the first day of each year in the lunar-solar calendar, Nisan 1.

For example, the year of the Crucifixion in 31 AD began on April 10 or 11, and the Crucifixion was likely 14 days later, on the Passover, during a full moon, on Wednesday, April 25, 31 AD, during a lunar eclipse. This means it did not happen in a year with 13 months. The sequence is delayed one year every 342 years, four days every 1368 years, and the dates change over time, one day every 228 years, six days every 1368 years.

228-year Corrections Observed between 747 BC and 622 AD

Notes on TABLE 3a: It seems uncanny that the Nabonassar calendar of 747 BC flowed seamlessly into the Islamic calendar after 622 AD. This period unveils the true way to correct the 19-year mismatch with the 235 moons for 1368 years (342×4) (228×6) in 622 AD, after 72 cycles of 19 years. The mismatch accumulated until the 19-year sequence needed to be shifted by one day every 228 years in respect to the solar (tropical) 19 years. Perhaps this was an anomaly resulting from observations recorded for 1368 years instead of the result of calculations. The 19-year sequence was actually slipping one day every 228 years.

Therefore, a calendar could be designed to slip one day every 228 years as in TABLE 2. Simply delay one month every 342 years by placing an intercalary “extra” moon after (instead of before 3/21) the earliest year of the 19 years. This will change the expected 4/19 (the latest day of the 19-year cycle) into 3/21 (the earliest day of the 19-year cycle) as in TABLE 3a. This delay every 342 years deletes the one-day mismatch every 235 moons when compared with 228 solar (Gregorian calendar) years, that is, six days every 1368 years (as in TABLE 3a).

Moreover, the Babylonian calendar months alternated between 29 and 30 days (months = 29.5 days). There were 235 moons in 19 years. 12 years were common with 12 moons. Seven were intercalary with 13 moons. Six of the seven extra moons every 19 years had 30 days and were intercalated after the 12th month as Adar II (<http://www.friesian.com/calendar.htm>).

The seventh intercalated moon was in the 17th year of the 19. It was inserted after the sixth month as Ilul II instead of Adar II, and it had 29 days instead of 30. Thus, 19 years end on the same date they had begun.

For more detail, go to <http://code251.com/accurate-calendar.pdf>.

The Lunar-Solar Year Calculated from March 21

The Jewish Hebrew rabbinical lunar-solar year actually began on the spring equinox, 3/21,

3761 BC, 177 days (6 moons) before Sunday, September 6, 3761 BC (on the Gregorian calendar). Adam was allegedly created on the sixth day, Friday, September 11, 3761 BC.

If we began the lunar-solar calendar on the equinox, on 3/21, the latest date in the 19-year intercalary cycle would be on 4-18 or 4-19. At the end of every 342 years (228 + 114) or 684 years (456 + 228), simply replace the latest date (4-18 or 4-19) with the earliest date, that is, 3-20 or 3-21 (as in TABLE 3a). Dates thereafter will increase one day every 228 years, but, after 18 cycles of 342 years each (6498 years), the last 29-day intercalation will not be necessary to add in order to align the lunar-solar calendar with the Gregorian calendar.

The solution in TABLE 2 results in having a calendar averaging 365.246886 days and loses only one day in 7161 years. This is twice as accurate as the Gregorian year of 365.2425 days. Thus, the lunar solar calendar from 747 to 622 must have been established by observation, not by mere calculation.

For more detail on the 288-year, 342-year cycles and the average solar year, see:

<http://www.friesian.com/calendar.htm>

The True Time was Known and Altered

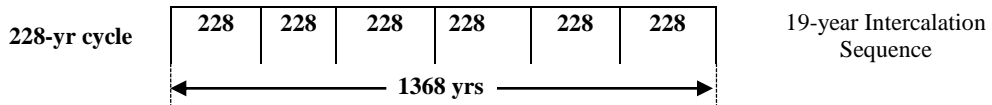
Josephus recorded evidence after 70 AD that he knew the true period of time between the first and second temples was 656 years, 166 years longer than 490 years. The true period was finally confirmed once and for all by Sir Henry Rawlinson when he deciphered the Persian Behistun Inscription after 1843 AD, after which the Millerites and Adventists began to claim that 1844 AD was 2300 years after 457 BC.

The true date of Creation is likely 196 years (4 Jubilees) earlier than 3761 BC, that is, in 3957 BC. As said before, the rabbis had removed 60 years before Abraham and dated the first temple as 832 BC, that is 136 years later than Kenneth Kitchen's date for the temple, 968 BC (60 + 136 = 196).

The original code could not be restored without first restoring the Sabbatical, Jubilee, 251-year and 427-year patterns.

TABLE 4. 228-Year Intercalary Cycle from 747 BC to 622 AD, 1368 years

The 19-year cycle needs corrected one day every 228 years
 The intercalary moon is represented by +19 days (-11 + 30 = +19)



Babylon 19-yr. Sequence	Hebrew 19-yr. Sequence	747	519	291	63 BC	166 AD	394	622	747 BC V	63 BC V	166 AD V
0		3/27	3/28	3/29	3/30	3/31	4/1	4/2			
		+19	+19	+19	+19	+19	-11	-11			
1	12	4/15	4/16	4/17	4/18	4/19	3/21	3/22			
		-11	-11	-11	-11	-11	+18	+19			
2	13	4/4	4/5	4/6	4/7	4/8	4/8	4/10			
		-11	-11	-11	-11	-11	-11	-11			
3	14	3/24	3/25	3/26	3/27	3/28	3/28	3/30	3	3	3
		+19	+19	+19	+19	+19	+19	+19			
4	15	4/12	4/13	4/14	4/15	4/16	4/16	4/18			
		-11	-11	-11	-11	-11	-11	-11			
5	16	4/1	4/2	4/3	4/4	4/5	4/5	4/7			
		-11	-11	-11	-11	-11	-11	-11			
6	17	3/21	3/22	3/23	3/24	3/25	3/25	3/27	6	6	6
		+18	+18	+19	+19	+19	+19	+19			
7	18	4/8	4/9	4/11	4/12	4/13	4/13	4/15			
		-11	-11	-11	-11	-11	-11	-11			
8	19	3/28	3/29	3/31	4/1	4/2	4/2	4/4	8		
		+19	+19	+19	-11	-11	-11	-11			
9	1	4/16	4/17	4/19	3/21	3/22	3/22	3/24		9	9
		-11	-11	-11	+18	+18	+19	+19			
10	2	4/5	4/6	4/8	4/8	4/9	4/10	4/12			
		-11	-11	-11	-11	-11	-11	-11			
11	3	3/25	3/26	3/28	3/28	3/29	3/30	4/1	11	11	11
		+19	+19	+19	+19	+19	+19	-11			
12	4	4/13	4/14	4/16	4/16	4/17	4/18	3/21			
		-11	-11	-11	-11	-11	-11	+18			
13	5	4/2	4/3	4/5	4/5	4/6	4/7	4/8			
		-11	-11	-11	-11	-11	-11	-11			
14	6	3/22	3/23	3/25	3/25	3/26	3/27	3/28	14	14	14
		+19	+19	+19	+19	+19	+19	+19			
15	7	4/10	4/11	4/13	4/13	4/14	4/15	4/16			
		-11	-11	-11	-11	-11	-11	-11			
16	8	3/30	3/31	4/2	4/2	4/3	4/4	4/5	16		
		+19	+19	-11	-11	-11	-11	-11			
17	9	4/18	4/19	3/22	3/22	3/23	3/24	3/25		17	17
		-11	-11	+18	+19	+19	+19	+19			
18	10	4/7	4/8	4/9	4/10	4/11	4/12	4/13	Crucifixion on full moon of 4/25/31 AD 1368 yrs (228 x 6) (342 x 4)		
		-11	-11	-11	-11	-11	-11	-11			
19	11	3/27	3/28	3/29	3/30	3/31	4/1	4/2	19	19	19

In 166 AD, the latest 19-year sequence began on 4-19, and Pentecost would be about 91 days later, on about 6-20, the last day of spring (against the Gregorian calendar). This sequence would repeat until a calendar correction on 3-21, 394 AD, which would return the sequence back to 3-21 and prevent Pentecost from ever being in the summer. This correction would be needed again every 342 years, in 737, 1078, 1420, 1762 and 2104 AD.

The latest Passover would be on about 5-03 (4-19 + 14), and earliest would be on about 4-03 (3-21 + 14).

In contrast, the Easter cycle began years as early as 15 days before the spring equinox, and Passover could be as early as one day before the equinox on 3-21 (against the Gregorian calendar).

Note on TABLE 2b, Column 394 AD

19-year cycle and Easter cycle of Dionysius began in 532 AD with Passover full moons on 4/05, 5/25, 4/13, 4/02, 3/22, 4/10, 3/30, 4/18, 4/07, 3/27, 4/15, 4/04, 3/24, 4/12, 4/01, 3/21, 4/09, 3/29, 4/17 and 4/05. After the Passover, the Wave Sheaf Offering (Easter Sunday) was 50 days before Pentecost Sunday. The first Sunday after Passover is easily found with the following tool: <http://www.timeanddate.com/>.

These Passover dates are 14 days after the below new moons listed from the 5th year of the 394 AD column down to 626 AD in the 4th year of the 394 AD column. Notice also that the 532-year cycle also existed from 3761 BC (from the Jewish date of creation) down to 37 BC (when Herod captured Jerusalem (after 532 x 7 years after creation). This period is 532 times 7 or 76 jubilees.

TABLE 2b. 228-Year Cycle 3957 BC to 622 AD, Continued

	1141	1369	1595	1825	2053	2281	2509	2737		
	228	228	228	228	228	228	228	228	19	
AD	←----- 1368 yrs -----→									
	394	622	850	1078	1306	1534	1762	1990	1990	2009
0	4/1	4/2	4/3	4/4	4/5	4/6	4/7	4/8	1989	2008
1	3/21	3/22	3/23	3/24	3/25	3/26	3/27	3/28	1990	2009
2	4/8	4/10	4/11	4/12	4/13	4/14	4/15	4/16	1991	2010
3	3/28	3/30	3/31	4/1	4/2	4/3	4/4	4/5	1992	2011
4	4/16	4/18	4/19	3/21	3/22	3/23	3/24	3/25	1993	2012
5	4/5	4/7	4/8	4/8	4/10	4/11	4/12	4/13	1994	2013
6	3/25	3/27	3/28	3/28	3/30	3/31	4/1	4/2	1995	2014
7	4/13	4/15	4/16	4/16	4/18	4/19	3/21	3/22	1996	2015
8	4/2	4/4	4/5	4/5	4/7	4/8	4/8	4/9	1997	2016
9	3/22	3/24	3/25	3/25	3/27	3/28	3/28	3/29	1998	2017
10	4/10	4/12	4/13	4/13	4/15	4/16	4/16	4/17	1999	2018
11	3/30	4/1	4/2	4/2	4/4	4/5	4/5	4/7	2000	2019
12	4/18	3/21	3/22	3/22	3/24	3/25	3-25	3/26	2001	2020
13	4/7	4/8	4/9	4/10	4/12	4/13	4/13	4/14	2002	2021
14	3/27	3/28	3/29	3/30	4/1	4/2	4/2	4/3	2003	2022
15	4/15	4/16	4/17	4/18	3/21	3/22	3/22	3/23	2004	2023
16	4/4	4/5	4/6	4/7	4/9	4/10	4/10	4/11	2005	2024
17	3/24	3/25	3/26	3/27	3/28	3/30	3/30	4-1	2006	2025
18	4/12	4/13	4/14	4/15	4/16	4/18	4/18	3-21	2007	2026
19	4/1	4/2	4/3	4/4	4/5	4/7	4/7	4/8	2008	2027

Problem: 235 Moons Slightly Longer than 19 Years

1.) The tropical calendar has 365 days and needs a leap year every four years to make it 365.25 days. It subtracts one day every 128 years against the spring equinox and the seasons.

It equals 365.2421988 days (365 + .25 - 1/128 = 365.2421988 days per solar year)

2.) The Julius Caesar calendar had 365 days and needed a leap year every four years to make it 365.25 (365 + .25 = 365.25). It was one day too long every 128 years and needed to be corrected by the Gregorian calendar.

3.) The Gregorian calendar ignores the 128-year correction and simply deletes three leap days every 400 years: (365 + .25 - 3/400 = **365.2425**), that is, (365 + .25 - .0075 = **365.2425**), that is, (365.2500 - 3/400 = **365.2425**).

(365 + .25 = 365.25). It has 83,275.29 days in 228 years and needs one day every 228 years to match the Metonic.

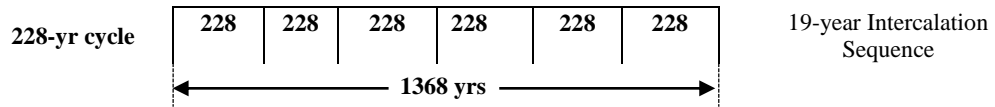
4.) The Metonic lunar-solar calendar has 365.2467463 days per solar year. The number of days in 19 years can be compared with the days in 235 moons in 19 years. It has 83,276.256 days in 228

TABLE 3. 228, 342 and 1368-year Cycles
(Based on timeanddate.com) (Israel/Show Calendar)

AD	New Moon		Full Moon		AD	Full Moon		
31	Apr 10	Tue	Apr 25	Wed	31	Apr 25	Wed	Crucifixion in 31 AD
<u>+228</u>					<u>+342</u>			
259	Apr 10	Sun	Apr 24	Sun	373	Apr 23	Tue	
<u>+228</u>								
487	Apr 09	Thur	Apr 23	Thur				
<u>+228</u>					<u>+342</u>			
715	Apr 08	Mon	Apr 23	Tue	715	Apr 23	Tue	
<u>+228</u>								
943	Apr 07	Fri	Apr 23	Sun				
<u>+228</u>					<u>+342</u>			
1171	Apr 07	Wed	Apr 21	Wed	1057			
<u>+228</u>					<u>+342</u>			
1399	Apr 06	Sun	Apr 20	Sun	1399	Apr 20	Sun	1368 yrs (228 x 6) (342 x 4)
<u>+228</u>								
1627	Apr 05	Thur	Apr 20	Fri				
<u>+228</u>					<u>+342</u>			
1855	Apr 04	Mon	Apr 20	Wed	1741	Apr 20	Mon	
<u>+228</u>					<u>+342</u>			
2083	Apr 17	Sat	Apr 2	Fri	2083	Apr 2	Fri	
<u>+228</u>								
2311	Apr 20	Sun	Apr 4	Tue				
<u>+228</u>					<u>+342</u>			
2539	Apr 20	Mon	Apr 4	Sat	2425	Apr 3	Tue	
<u>+228</u>					<u>+342</u>			
2767	Apr 20	Thur	Apr 6	Thur	2767	Apr 6	Thur	1368 yrs (228 x 6) (342 x 4)
<u>+228</u>								
2995	Apr 21	Tue	Apr 7	Tue				
<u>+228</u>					<u>+342</u>			
3223	Apr 20	Sat	Apr 7	Fri	3109	Apr 7	Wed	
<u>+228</u>					<u>+342</u>			
3451	Apr 24	Thur	Apr 8	Tue	3451	Apr 8	Tue	

TABLE 4. 228-Year Intercalary Cycle from 747 BC to 622 AD, 1368 years

The 19-year cycle needs corrected one day every 228 years
 The intercalary moon is represented by +19 days (-11 + 30 = +19)



Babylon 19-yr. Sequence	Hebrew 19-yr. Sequence	747	519	291	63 BC	166 AD	394	622	747 BC V	63 BC V	166 AD V
0		3/27	3/28	3/29	3/30	3/31	4/1	4/2			
		+19	+19	+19	+19	+19	-11	-11			
1	12	4/15	4/16	4/17	4/18	4/19	3/21	3/22			
		-11	-11	-11	-11	-11	+18	+19			
2	13	4/4	4/5	4/6	4/7	4/8	4/8	4/10			
		-11	-11	-11	-11	-11	-11	-11			
3	14	3/24	3/25	3/26	3/27	3/28	3/28	3/30	3	3	3
		+19	+19	+19	+19	+19	+19	+19			
4	15	4/12	4/13	4/14	4/15	4/16	4/16	4/18			
		-11	-11	-11	-11	-11	-11	-11			
5	16	4/1	4/2	4/3	4/4	4/5	4/5	4/7			
		-11	-11	-11	-11	-11	-11	-11			
6	17	3/21	3/22	3/23	3/24	3/25	3/25	3/27	6	6	6
		+18	+18	+19	+19	+19	+19	+19			
7	18	4/8	4/9	4/11	4/12	4/13	4/13	4/15			
		-11	-11	-11	-11	-11	-11	-11			
8	19	3/28	3/29	3/31	4/1	4/2	4/2	4/4	8		
		+19	+19	+19	-11	-11	-11	-11			
9	1	4/16	4/17	4/19	3/21	3/22	3/22	3/24		9	9
		-11	-11	-11	+18	+18	+19	+19			
10	2	4/5	4/6	4/8	4/8	4/9	4/10	4/12			
		-11	-11	-11	-11	-11	-11	-11			
11	3	3/25	3/26	3/28	3/28	3/29	3/30	4/1	11	11	11
		+19	+19	+19	+19	+19	+19	-11			
12	4	4/13	4/14	4/16	4/16	4/17	4/18	3/21			
		-11	-11	-11	-11	-11	-11	+18			
13	5	4/2	4/3	4/5	4/5	4/6	4/7	4/8			
		-11	-11	-11	-11	-11	-11	-11			
14	6	3/22	3/23	3/25	3/25	3/26	3/27	3/28	14	14	14
		+19	+19	+19	+19	+19	+19	+19			
15	7	4/10	4/11	4/13	4/13	4/14	4/15	4/16			
		-11	-11	-11	-11	-11	-11	-11			
16	8	3/30	3/31	4/2	4/2	4/3	4/4	4/5	16		
		+19	+19	-11	-11	-11	-11	-11			
17	9	4/18	4/19	3/22	3/22	3/23	3/24	3/25		17	17
		-11	-11	+18	+19	+19	+19	+19			
18	10	4/7	4/8	4/9	4/10	4/11	4/12	4/13			
		-11	-11	-11	-11	-11	-11	-11			
19	11	3/27	3/28	3/29	3/30	3/31	4/1	4/2	19	19	19

In 166 AD, the latest 19-year sequence began on 4-19, and Pentecost would be about 91 days later, on about 6-20, the last day of spring (against the Gregorian calendar). This sequence would repeat until a calendar correction on 3-21, 394 AD, which would return the sequence back to 3-21 and prevent Pentecost from ever being in the summer. This correction would be needed again every 342 years, in 737, 1078, 1420, 1762 and 2104 AD.

The latest Passover would be on about 5-03 (4-19 + 14), and earliest would be on about 4-03 (3-21 + 14).

In contrast, the Easter cycle began years as early as 15 days before the spring equinox, and Passover could be as early as one day before the equinox on 3-21 (against the Gregorian calendar).

Delaying the 19-year cycle (from 4-01+19=4-20 into 4-01-11=3-21) to Correct the Gregorian calendar every 342 yrs

TABLE 5. Converting 4-20 into 3-21 after every 342 years

228 yrs		228 yrs		
3-30	3-31	4-01	4-01	
		+19	-11	
4-18	4-19	4-20	3-21	< With the delay
		-11	+19	19 delayed or 19 and 11 reversed
4-07	4-08	4-09	4-09	< Without the delay

This chart illustrates how the mismatch between the 12 x 19-yr. Gregorian calendar years and the 235 x 12 lunations in 228 years. The Gregorian has 83,275.29 days in 228 years and needs one day every 228 years to match the Metonic. The Metonic lunar-solar calendar has 365.2467463 days per solar year. The number of days in 19 years can be compared with the days in 235 moons in 19 years. It has 83,276.256 days in 228 years (83,276 - 86,275 = 1).

TABLE 6. Conversion from Julian Calendar to Gregorian Calendar

Julian Calendar	Revised Gregorian Calendar
1 st New Moon (Nisan 1)	1 st New Moon (Nisan 1)
in each 228 years (19 x 12)	in each 228 years (19 x 12)

Correction in AD 394		
Era of Nabonassar	747	4-15
	519	4-16
	291	4-17
	BC 63	4-18
3-21	AD 166	4-19
3-20	394	3-21
3-19	622	3-22
		1368 yrs
3-19	850	3-23
3-18	1078	3-24
3-17	1306	3-25
3-16	1534	3-26
3-16	1762	3-27
3-15	1990	3-28
		1368 yrs
		13 days of correction since 747 BC

The Julian loses one day every 128 years against the tropical solar calendar. The Gregorian loses one day every 3300 years against the tropical solar calendar.

Full Moons on the Equinox (on 3-21)

Debates arose over when a calendar should begin a 19-year cycle. To simplify matters, we'll refer to the Gregorian equinox (3-21) instead of the Julian equinox (3-23).

1. One side preferred to align a new moon with the spring equinox, and the first full moon (for Passover) would be 14 days later, on April 4. The next new moon would be on April 19, and the latest full moon (for Passover) would be 14 days later, on May 3. In 166 AD, the 19-years began on the latest date, on 4-19, and this would place Pentecost on about March 20, on the last day of spring and would be on the first day of summer. Therefore, the Gregorian calendar needs correction in 394 AD by changing 4-20 into 3-21 (as in TABLE 4).

2. The other side preferred to align a full moon with the spring equinox (March 21) after the year had begun 14 days earlier. The earliest Passover could be on the equinox, March 21, in which case, the next full moon would be 29 days later, on April 19. All full moons would be

between March 21 and April 19. This often placed the Passover very early in the grain harvest season.

If the 19-year cycle began 14 days before the full moon that aligned with the spring equinox, then this sets up a pattern for 19-year sequence for all full moons. Simply substitute the same pattern used for the calendar of new years beginning on the spring equinox. On the Gregorian calendar, this sequence would be on 3-21, 4-09, 3-29, 4-17, 4-05, 3-25, 4-13, 4-02, 3-22, 4-10, 3-30, 4-18, 4-07, 3-27, 4-15, 4-04, 3-24, 4-12, and 4-01.

Moreover, the earliest rabbinical calendar year likely began on Nisan 1 (on March 6) 177 days before the civil fall calendar began on Tishri 1 (August 24). This helps explain why the year one of the Hebrew calendar is year 9 of the Babylonian calendar. One begins with the full moon on the equinox. The other begins with the new moon on the equinox. One begins in the fall. The other begins in the spring.

Eventually, the Julian calendar was found to have gained one day against the seasons (the equinox) every 128 years since the Nicean Counsel in 325 AD and was corrected by using the Gregorian calendar in the 13 colonies of America after 1752 AD, in the time of George Washington.