| CODE 144 | $\underline{\text { CODE 166 }}$ | $\underline{\text { CODE 196 }}$ | $\underline{\text { CODE 228 }}$ | $\underline{\text { CODE 243 }}$ | $\underline{\text { CODE 251 }}$ |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $\underline{\text { CODE 294 }}$ | $\underline{\text { CODE 427 }}$ | $\underline{\text { CODE 490 }}$ | $\underline{\text { CODE 590 }}$ | $\underline{\text { CODE 666 }}$ | $\underline{\text { CODE 01010 }}$ |
| $\underline{\text { CODE 1260 }}$ | $\underline{\text { CODE1447 }}$ | $\underline{\text { CODE 1900 }}$ | $\underline{\text { CODE 1975 }}$ | $\underline{\text { CODE 2300 }}$ | $\underline{\text { CODE 6000 }}$ |



## Cycles Related to 4, 7, 28, 19 \& 532

FloydR. Cox (revised 9/01/2021)

Before exploring events related to a cycle of 532 years, some preliminary concepts need to be covered. First, there is the need to add one day every four years to change the 365 -day into having 365.25 days, Four years have 1460 days. The 1656 years between Adam and the flood is equal to 1460 years plus four jubilees. A 365 -day calendar loses 365 days in 1460 years. $1460 \backslash 4=365$.
Moreover, there is a 4 -year Olympic Cycle and a 4 -year election cycle in the U.S.
The $7^{\text {th }}$ year is called a sabbatical or land rest or year of release. Both 4 and 7 go into 28 years. These are solar years based upon the four seasons. Again, the calendar still has 365.25 days and is without any relation to new moons and lunar years and eclipses. There are 4 sabbaticals or 7 leap years in 28 years.

We can include the lunar cycle in 532 years by multiplying 28 solar years times 19 ( $28 \times 19=532$ years). 19 years equal 235 moons, and the dates on the Gregorian calendar repeat during the following 19 years cycles.

## Attaching Special Events to the 532-Years

That forms the "entry-level" information before we can associate special events to the 532 -years.
Evidently, the creators of the Hebrew calendar knew about the 532 -year cycle because their date of creation is 3761 BC , that is, 3724 years before Herod conquered Jerusalem in a sabbatical year, in 37 BC ,. The jubilee begins in the fall of a sabbatical year, on the day of Atonement.

3724 equals 532 times 7 . It is equal to four jubilees times 19. So it is also a 19 -year cycle. It is also equal to 76 jubilees.
The book of Jubilees says Adam lived 930 years and died in the $931^{\text {st }}$ year, in the $19^{\text {th }}$ jubilee.
532 years after the fall of Babel, Joseph became ruler of Egypt at age $30(251+251+30=532)$.
King Nebuchadnezzar of Babylon became as a wild beast for seven years beginning in 569 BC, 532 years before Herod conquered Jerusalem in 37 BC .

Dionysius published a 532 -year pattern in 525 AD. In 725, Bede made an Easter cycle with 19 lunar years and 28solar years in a period of 532 years.
$37 \mathrm{BC}+532=496 \mathrm{AD}+532=1028 \mathrm{AD}+532=1560 \mathrm{AD}+532=\mathbf{2 0 9 2} \mathrm{AD}-70=\mathbf{2 0 2 2} \mathrm{AD}$.
1028 AD $+23 \times 7=1189$ AD, the sabbatical when Richard the Lionhearted was crowned just before a jubilee.
Sabbaticals were in 70 AD $+(490 \times 7)=$ Sabbatical in 2030 AD.
But if a Jubilees were in 63 AD $+(490 \times 7)=$ Jubilee in 2023 AD.
Regardless which dates you use to begin the 19 years, the next 19 years will repeat on the same dates as in Tables $1 \& 2$. If the 19 years start with a solar eclipse on March 20, 71 AD, then the next 19 years will likely begin with a solar eclipse on March 20$21,90 \mathrm{AD}$ as in TABLE 1 below. This also repeats in years $14,33,52,71$ and 90 AD 19 years apart.

Much has been written about how the calendar was viewed in the first century, but it is not complicated. A Babylonian 19year calendar began in 747 BC , long before the first century. If a solar eclipse happened on a certain date, the new moon was almost always seen in Jerusalem on the next calendar day as illustrated HERE.

If a lunar year began with a new moon, on March 21, the Passover would be 14 days later.
A source found HERE charts the earliest Easters. Note that the Wave Sheaf is also on Sundays during the full moon.

| Date AD | New Moon | Full Moon (equinox) | Sunday |
| :---: | :---: | :---: | :---: |
| 1761 | $3 / 06$ | $3 / 20$ | $3 / 22$ |
| 1818 | $3 / 06$ | $3 / 22$ | $3 / 22$ |
| 1913 | $3 / 07$ | $3 / 22$ | $3 / 23$ |
| 2285 | $3 / 06$ | $3 / 21$ | $3 / 22$ |

All nations have observed new and full moons and had names for the four seasons and their two equinoxes and two solstices. They are associated with the 19-year cycle. The Hebrew calendar is attached to the four seasons. The spring Passover and Wave Sheaf offering full moon until Pentecost is observed in the spring season, between the spring equinox on $3 / 21$ and before the summer solstice on $6 / 20$. These lunar years begin between March 21 and April 19 by manipulating the 11 days and 19 days at the end of each of the 19 years, that is, -11 days $(365-354=11)$ at the end of years $1,2,4,5,7,9,10,12,13,15,16$, and 18 . There would be 19 days ( 30 $-11=19)$ at the end of years $3,6,8,11,14,17$ and 19.
$(-11 \times 12=-132)(+19 \times 7=+133)$. The $19^{\text {th }}$ year has one day too many; So, the $13^{\text {th }}$ moon in $19^{\text {th }}$ yr. must have 29 days, not 30.

Table 1.
19 yrs x 3

TABLE 2.


Lunar Eclipses on 3/20-3/21

| Yr AD |  | Yr AD |  | Yr AD |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & 413 \\ & \mathrm{AD} \end{aligned}$ | $\begin{array}{r} 3 / 20 \\ +4 / 19 \end{array}$ | $\begin{aligned} & \hline 432 \\ & \text { AD } \end{aligned}$ | $\begin{array}{r} 3 / 21 \\ +4 / 18 \end{array}$ | $\begin{aligned} & \mathbf{4 5 1} \\ & \text { AD } \end{aligned}$ | $\begin{array}{r} 3 / 20 \\ +4 / 19 \end{array}$ |
| 414 | $\begin{aligned} & 3 / 08 \\ & 4 / 07 \end{aligned}$ | 433 | 4/09 | 452 | 4/07 |
| 415 | 3/27 | 434 | 3/27 | 453 | 3/26 |
| 416 | $\begin{aligned} & \hline 3 / 16 \\ & 4 / 15 \\ & \hline \end{aligned}$ | 435 | $\begin{aligned} & 3 / 16 \\ & 4 / 15 \end{aligned}$ | 454 | $\begin{aligned} & \hline 3 / 16 \\ & 4 / 15 \end{aligned}$ |
| 417 | $\begin{aligned} & \hline 3 / 06 \\ & 4 / 05 \end{aligned}$ | 436 | $\begin{aligned} & 3 / 05 \\ & 4 / 04 \end{aligned}$ | 455 | 4/05 |
| 418 | 3/24 | 437 | 3/23 | 456 | 3/24 |
| 419 | $\begin{aligned} & 3 / 13 \\ & 4 / 12 \end{aligned}$ | 438 | $\begin{aligned} & 3 / 12 \\ & 4 / 11 \end{aligned}$ | 457 | $\begin{aligned} & 3 / 12 \\ & 4 / 11 \end{aligned}$ |
| 420 | 4/01 | 439 | 4/01 | 458 | 4/01 |
| 421 | $\begin{aligned} & 3 / 20 \\ & 4 / 19 \end{aligned}$ | 440 | $\begin{aligned} & 3 / 21 \\ & 4 / 19 \end{aligned}$ | 459 | $\begin{aligned} & 3 / 21 \\ & 4 / 20 \end{aligned}$ |
| 422 | $\begin{aligned} & \hline 3 / 09 \\ & 4 / 08 \end{aligned}$ | 441 | $\begin{aligned} & \hline 3 / 09 \\ & 4 / 08 \end{aligned}$ | 460 | $\begin{aligned} & \hline 3 / 10 \\ & 4 / 09 \end{aligned}$ |
| 423 | 3/29 | 442 | 3/28 | 461 | 3/28 |
| 424 | $\begin{aligned} & \hline 3 / 18 \\ & 4 / 17 \end{aligned}$ | 443 | $\begin{aligned} & 3 / 18 \\ & 4 / 17 \end{aligned}$ | 462 | $\begin{aligned} & \hline 3 / 17 \\ & 4 / 16 \end{aligned}$ |
| 425 | $\begin{aligned} & \hline 3 / 07 \\ & 4 / 06 \end{aligned}$ | 444 | $\begin{aligned} & 3 / 07 \\ & 4 / 06 \end{aligned}$ | 463 | 4/06 |
| 426 | 3/25 | 445 | 3/25 | 464 | 3/24 |
| 427 | $\begin{aligned} & 3 / 15 \\ & 4 / 14 \end{aligned}$ | 446 | $\begin{aligned} & 3 / 14 \\ & 4 / 13 \end{aligned}$ | 465 | $\begin{aligned} & 3 / 14 \\ & 4 / 13 \end{aligned}$ |
| 428 | 4/03 | 447 | 4/03 | 466 | 4/02 |
| 429 | 3/23 | 448 | 3/23 | 467 | 3/23 |
| 430 | $\begin{aligned} & 3 / 11 \\ & 4 / 10 \end{aligned}$ | 449 | $\begin{aligned} & 3 / 12 \\ & 4 / 11 \end{aligned}$ | 468 | $\begin{aligned} & \hline 3 / 10 \\ & 4 / 09 \end{aligned}$ |
| 431 | 3/31 | 450 | 3/30 | 469 | 3/29 |
| 432 | $\begin{aligned} & 3 / 19 \\ & 4 / 18 \end{aligned}$ | 451 | $\begin{array}{r} 3 / 19 \\ +19 \end{array}$ | 470 | $\begin{array}{r} 3 / 19 \\ +19 \end{array}$ |

3/19 Lunar eclipse 3/19 Lunar eclipse 3/19 Lunar eclipse

## Antiquity of the Julian Calendar

To understand the above three calendars, the antiquity of the Julian calendar need to be addresses.
It was created by Julius Caesar in 44 BC by adding a leap day every four years. Each year had 365.25 days. It became a 7 -year cycle in 28 years ( $4 \times 7=28$ yrs). It became a 19 -year cycle in 532 years ( $28 \times 19=$ 532). The previous calendar had 365 days.

After 37 BC, when Herod captured Jerusalem and ended the Maccabean Levitical priesthood that had ruled Judea for 18 sabbaticals. This may explain how the Hebrew date of creation was placed at 532 years times 7 before Herod.

Moreover, Nebuchadnezzar, king of Babylon, was as a wild animal for 7 years, 569 to 562 BC. This happened 532 years before Herod ( 569 to 37 = 532).

Moreover, Alexander the Great visited Jerusalem and allowed the High Priest to continue keeping the 7 -year land rests in 331 BC. This was 6 jubilees before Herod ( $331-37=294$ yrs).

## Julian Calendar Needed Corrected?

The Julian calendar continued to be observed from 3761 BC to 1582 AD, for 5,343 years, after which it was allegedly one day too long every 128 years, 10 days too long every 1280 years. So, Pope Gregory
subtracted 10 days from a new version and replaced the 128 -year corrections by subtracting three days every 400 years. These were done in years $100,200,300$, but year 400 retains the leap day.

The Easter tables before 1582 follow the Julian calendar still followed by the Eastern Church. The Western church followed the Gregorian Easter Calendar. The Gregorian year has 365.2425 days.

## The Friesian Calendar Correction

The Fiesian School agrees that the Julian calendar was too long one day every 128 years, but offered a different solution. It finds there is a 228-year pattern between the Babylonian calendar in 747 BC and the Mohammad calendar in 622 AD. This is: $(747+622=1368) ; 228 \times 6=1368 \mathrm{yrs}(342 \times 4)$; and ( $72 \times$ 19). This means the Gregorian calendar lacked one day every 228 years ( $19 \times 12$ ), in 2820 moons.

Years are adjusted by manipulating the 30 -day $13^{\text {th }}$ month, which is divided into 11 and 19 days 7 times in 19 years and by delaying the $342^{\text {nd }}$ year. The $13^{\text {th }}$ month in the $19^{\text {th }}$ years has 29 days.

From 1407 BC (Joshua) to 2014 AD $=3420$ years ( $342 \times 10$ ).
By delaying the 19 -year cycle every 342 years 19 times in 6498 years ( $342 \times 19=6498$ ), 29 days drop from the bottom of the chart, and the cycle starts over.

The school settled with the equation, $365+1 / 4-1 / 300-29 / 6498$ averages 365.2422038 days per year while the seasons are 365.24219878 days.
365.2422038
365.2421987
.0000051 days off in about 200,000 years
Details on the 342-year delays are illustrated on the two links posted above and HERE.
From 1407 BC (Joshua) to 2014 AD $=3420$ years ( $342 \times 10$ ).
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. (see TABLE 6).

## Postponements

Some have esteemed the importance of the Hebrew by connecting important events with it. For instance, there are 9 months between Hanukkah on $12 / 25 / 5$ BC and Trumpets on $9 / 22 / 4 \mathrm{BC}$. This is used to speculate that Jesus was born in the fall, not in the winter, but this would place His conception on about 12/25/5 BC (http://www.cgsf.org/dbeattie/calendar/?roman=5+bc). It would also place His birth after Herod's death in the spring of 4 BC ; so they cunningly move Herod's death to 2 BC .

In years $3,6,8,11,14,17$, and 19 , these two events are 10 months apart.
Others claim Christ may return on Trumpets, but one of the postponement rules say Trumpets cannot be on a Friday; it is the Preparation Day for the weekly Sabbath.

Personally, NASA's new and full moons are accurate, but making postponements for meetings is an administrative decision.

It is a fact that the 18-year eclipse cycle was recorded on clay tablets from 472 to 310 BC . It was a pattern that repeated during the first century, which was confirmed by witnesses in the first century.

TABLE 3.
Calendars Deal with Round Numbers

| 19-year <br> Cycle |  | Epact or Yearly lunar-solar gap | $\begin{aligned} & \hline \text { Rounded Easter } \\ & \text { 19-Year } \\ & \text { Calendar Epact } \\ & (931 \mathrm{AD}) \end{aligned}$ |
| :---: | :---: | :---: | :---: |
| 4/16 | 19 | -29.44536 | $29-19=10$ |
| 4/05 | 1 | -10.8752 | $10+11=21$ |
| 3/25 | 2 | -21.7504 | $21-19=02$ |
|  |  | -32.6256 |  |
| 4/13 | 3 | -3.0951 | $2+11=13$ |
| 4/02 | 4 | -13.9703 | $13+11=24$ |
| 3/22 | 5 | -24.8455 | $24-19=05$ |
|  |  | -35.7207 |  |
| 4/10 | 6 | -6.190112 | $05+11=16$ |
| 3/30 | 7 | -17.065312 | $16+11=27$ |
| 4/18 | 8 | -27.940512 | $27-19=08$ |
|  |  | -38.815712 |  |
| 4/07 | 9 | -9.285124 | $08 \quad+11=19$ |
| 3/27 | 10 | -20.160324 | $\begin{array}{ll} 19 \quad+11=30 \\ -19= & 00 \end{array}$ |
|  |  | -31.035524 |  |
| 4/15 | 11 | -1.504936 | 30 or 0 |
| 4/04 | 12 | -12.380136 | $11+11=22$ |
| 3/24 | 13 | -23.255336 | $22-19=03$ |
|  |  | -34.130536 |  |
| 4/12 | 14 | -4.599948 | $3+11=14$ |
| 4/01 | 15 | -15.475148 | $14+11=25$ |
| 3/21 | 16 | -26.350348 | $25-19=06$ |
|  |  | -37.225548 |  |
| 4/08 | 17 | -7.69496 | $6+11=17$ |
| 3/28 | 18 | -18.57016 | $17+12=29$ |
| 4/16 | 19 | $\begin{array}{r} -29.44536 \\ \hline 29.5350588 \end{array}$ |  |
| Lunar month $=29.530588$ days (Solar time) |  |  |  |

TABLE 4. 19-yr. Epach

| 19 | 4/16 |
| :---: | :---: |
|  | -11 |
| 1 | 4/05 |
|  | -11 |
| 2 | 3/25 |
|  | +19 |
| 3 | 4/13 |
|  | -11 |
| 4 | 4/02 |
|  | -11 |
| 5 | 3/22 |
|  | +19 |
| 6 | 4/10 |
|  | -11 |
| 7 | 3/30 |
|  | +19 |
| 8 | 4/18 |
|  | -11 |
| 9 | 4/07 |
|  | -11 |
| 10 | 3/27 |
|  | +19 |
| 11 | 4/15 |
|  | -11 |
| 12 | 4/04 |
|  | -11 |
| 13 | 3/24 |
|  | +19 |
| 14 | 4/12 |
|  | -11 |
| 15 | 4/01 |
|  | -11 |
| 16 | 3/21 |
|  | +18 |
| 17 | 4/8 |
|  | -11 |
| 18 | 3/28 |
|  | +19 |
| 19 | 4/16 |


| New Moon <br> Solar Eclipses | Nisan 1 <br> New Moons at |
| :---: | :---: |
| Dates AD | Jerusalem AD |
| $3 / 19 / 14$ | $3 / 20 / 14$ |
| $3 / 20 / 71$ | $3 / 21 / 71$ |
| $3 / 19 / 1624$ | $3 / 21 / 1624$ |
| $3 / 20 / 1643$ | $3 / 21 / 1643$ |
| $3 / 20 / 1662$ | $3 / 21 / 1662$ |
| $3 / 19 / 1996$ | $3 / 21 / 1996$ |
| $3 / 20 / 2015$ | $3 / 21 / 2015$ |
| $3 / 20 / 2034$ | $3 / 21 / 2034$ |

## 5. Hebrew Round Numbers

30 Nisan
29 Iyar
30 Sivan
29 Tammuz
30 Av
29 Elul
30 Tishrei
30 Cheshvan
30 Kislev
29 Tevet
30 Shevat
30 Adar I
354 Days
29 Adar II (instead of 30 in $19^{\text {th }} \mathrm{yr}$.)

$502 \times 7=3514(251 \times 14)$
$\underline{30} \times 7=\underline{210}(30 \times 7)$
532 days $3724(3761-37 B C)$
$-11 \times 19=-209$
$+30 \times 7=+210$
(Subtract 1 day from leap month in $19^{\text {th }}$ year)

## 532 days in 1.5 Lunar Years From Exodus to Scouting the Promised Land

The month of the Exodus begins with a new moon on Nisan 1 (on April 9. $-1446=1447$ BC). NASA says there was a solar eclipse on March 21 in that year (https://eclipse.gsfc.nasa.gov/SEcat5/SE-1499--1400.html).
The Passover was on the $14^{\text {th }}$, and the Exodus was on the $15^{\text {th }}$. That first lunar year had 354 days ( $291 / 2 \times 12=354$ ):

First year of the Exodus:
30 Nisan $-1446=\underline{1447 B C}$
29 Iyar
30 Sivan
29 Tammuz
30 Av
29 Elul
30 Tishrei
29 Cheshvan
30 Kislev
29 Tevet
30 Shevat
30 Adar I
354 Days (Hebrew Calendar HERE)
There are several clues as to when the 177 days ended in the second year.

1. I personally picked grapes in my back yard and ate them on Tishri 1 (on the feast of Trumpets).
2. The 12 scouts explored the Promised Land 40 days and returned with giant grapes (Num. 13:25).
3. If the scouts returned on Tishri 1, then they began scouting on Av 20 (Aug 24) (Num 13:1).
4. If this is true, the scouts returned 532 days after the first lunar year began after a solar eclipse (NASA).
5. If true, then perhaps the 40 years in the wilderness began after the second year (Deut. 2:14).

Group this with when Joseph stood before the Pharaoh at the age of 30,532 years, after the nations were scattered from Babel $(251+251+30=532)$.

Group this with when Nebuchadnezzar became a wild animal 7 years, in 569 BC, $\underline{532 \times 6}$ years after the Jews' date of Creation in 3761 BC,

Group this with Nebuchadnezzar in 569 BC with 532 years $(30+251+251=532) \underline{\text { before Herod conquered }}$ Jerusalem in 37 BC, $532 \times 7$ years after the Jews' date of Creation in 3761 BC.

Allegedly, 14 years after crossing the Jordan, the tribes met at Shiloh to divide the land west of the Jordan (Joshua 18:1), 427 years before 966 BC, which was 427 years before Cyrus captured Babylon in 539 BC.

Nisan 1 (April 2), 2022 to Tishri 1 (Sep 16), $2023=532$ days. 1491 to $2023=532$ years.

