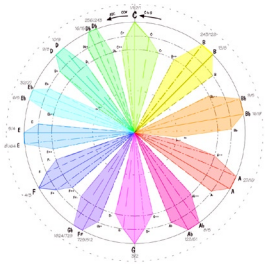


HarmonicTheory.com Number Diagrams



www.harmonictheory.com
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Notes for the Number Section

Any number on a blue line has a factor of 2.

Any number on a green line has a factor of 3.

Any number in red has a factor of 5 and is in a ratio of 5/6 to the number beneath it. Some numbers can go on for generations of 5/6ths and still be whole numbers. In these diagrams only the first and second generations from the root number are shown; the first generation is shown in red, and, if there is a second generation whole number, it is shown in black just above the number in red.

The number with factors of 2, 3, and/or 5 provide the primary warp and woof of the universal numeric fabric. These are the numbers used in the diagram **31,104—Day in the Life of Brahma**. The other numbers used —7, 11, and 37—each provide a different colored thread to the fabric but use the same multiples of 2, 3, and/or 5 to interweave with the primary 2-3-5 structure.

Any number on an orange line has a factor of 7. 7 is added in the diagram **15120—The Lesser Maze in Theosophy** because it adds numbers to the canon related to the ideal synodic moon cycle, and the ideal cycles of the outer planets Uranus, Neptune, and Pluto. 15120 is also the sum of all the plane angles of the five Platonic solids and the number of years it takes for the equinoctial point to pass through seven signs of the zodiac.

Any number on a magenta line has a factor of 11. 11 is added to the diagram **31680—Music and Cosmology of the Earth and Moon**. Astronomically and geometrically, the combined radii of the earth and moon is 5040 miles. A circle with a radius of 5040 miles has a circumference of 31680 miles (using $\pi = 22/7$). Musically, 22 notes taken from a harmonic 2-3-5 lattice and translated into degrees on a circle, when totaled equal 3168°. In terms of gematria, 3168 is the total of *The God Apollo + Pythagoras + Jesus*. (ο θεος Απολλων + Πυθαγορας + Ιησους). John Michell in *The Dimensions of Paradise* describes 3168 as the “representing the spirit which passes through and encircles the universe, Plato’s World-soul. The Christian term for this spirit, developed from the number 3168, was Lord Jesus Christ” (800 Κυριος + 888 Ιησους + 1480 Χριστος).

Any number on a purple line has a factor of 37. 37 is added in the diagram **Gematria of Pythagoras and Jesus**. The name *Pythagoras* (Πυθαγορας) is 864 in gematria. 864 is 36×24 . The name *Jesus* (Ιησους) in gematria is 888. $888 = 37 \times 24$.

15120 - The Lesser Maze in Theosophy

This table grows out of the Pythagorean lambda and tetractys

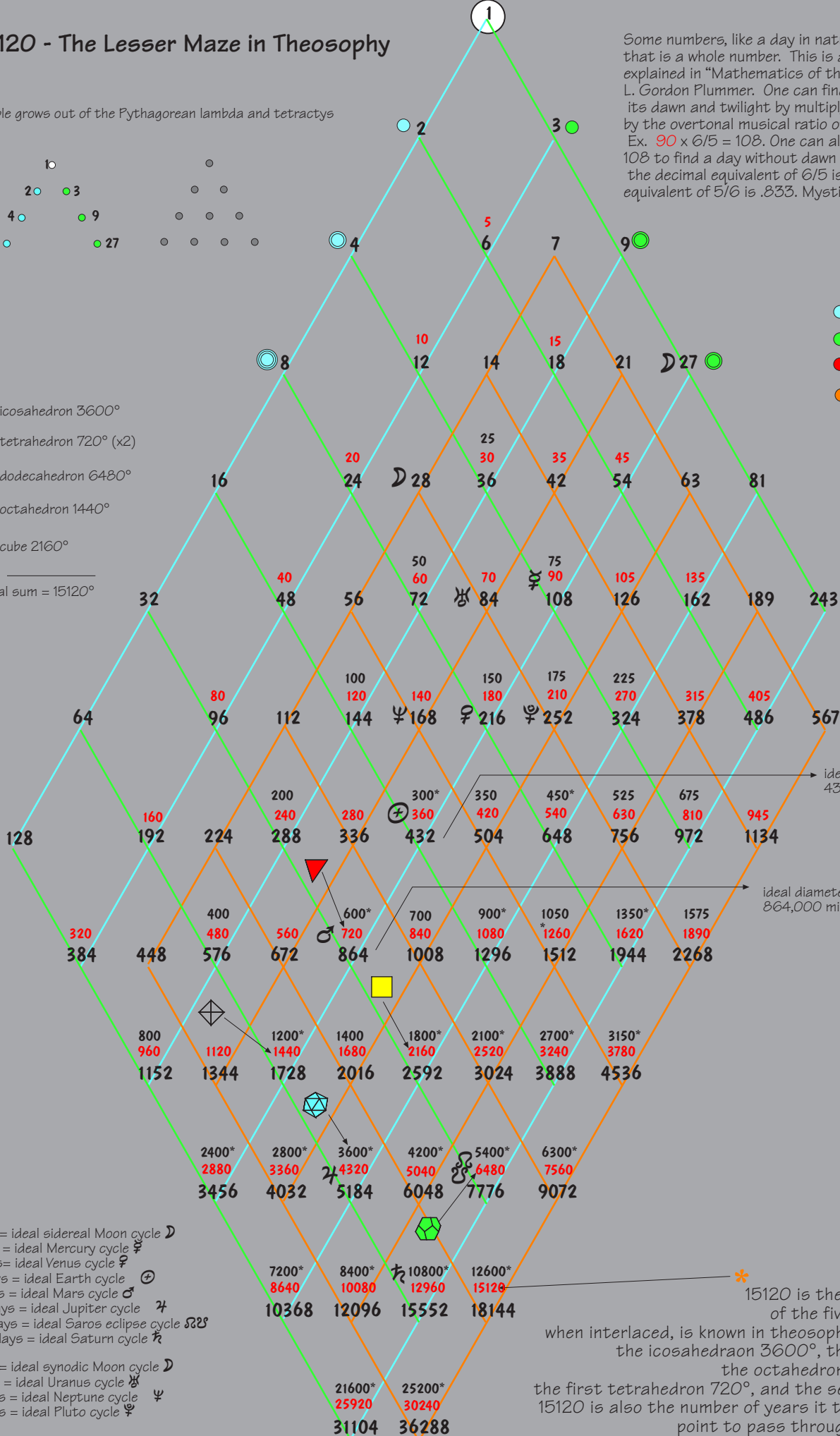
Some numbers, like a day in nature, have a "dawn and twilight" that is a whole number. This is a theosophical concept explained in "Mathematics of the Cosmic Mind" by L. Gordon Plummer. One can find a number with its dawn and twilight by multiplying the original number by the overtone musical ratio of the minor third (6/5).
 Ex. $90 \times 6/5 = 108$. One can also use the inverse $(5/6) \times 108$ to find a day without dawn and twilight. Mathematically the decimal equivalent of 6/5 is 1.200 and the decimal equivalent of 5/6 is .833. Mystically, the gematria is:



- icosahedron 3600°
 - tetrahedron 720° (x2)
 - dodecahedron 6480°
 - octahedron 1440°
 - cube 2160°
- Total sum = 15120°

- 2 related
- 3 related
- 5 related
- 7 related

- 27 days = ideal sidereal Moon cycle ☾
- 90 days = ideal Mercury cycle ☿
- 216 days = ideal Venus cycle ♀
- 360 days = ideal Earth cycle ♁
- 720 days = ideal Mars cycle ♂
- 4320 days = ideal Jupiter cycle ♃
- 6480 days = ideal Saros eclipse cycle ♁♁
- 10800 days = ideal Saturn cycle ♄
- 28 days = ideal synodic Moon cycle ☾
- 84 years = ideal Uranus cycle ♅
- 168 years = ideal Neptune cycle ♆
- 252 years = ideal Pluto cycle ♇



15120 is the sum of all plane angles of the five Platonic solids, which, when interlaced, is known in theosophy as the lesser maze—the icosahedraon 3600°, the dodecahedron 6480°, the octahedron 1440°, the cube 2160°, the first tetrahedron 720°, and the second tetrahedron 720°. 15120 is also the number of years it takes for the equinoctial point to pass through 7 signs of the zodiac.

31680 - Music and Cosmology of the Earth and Moon

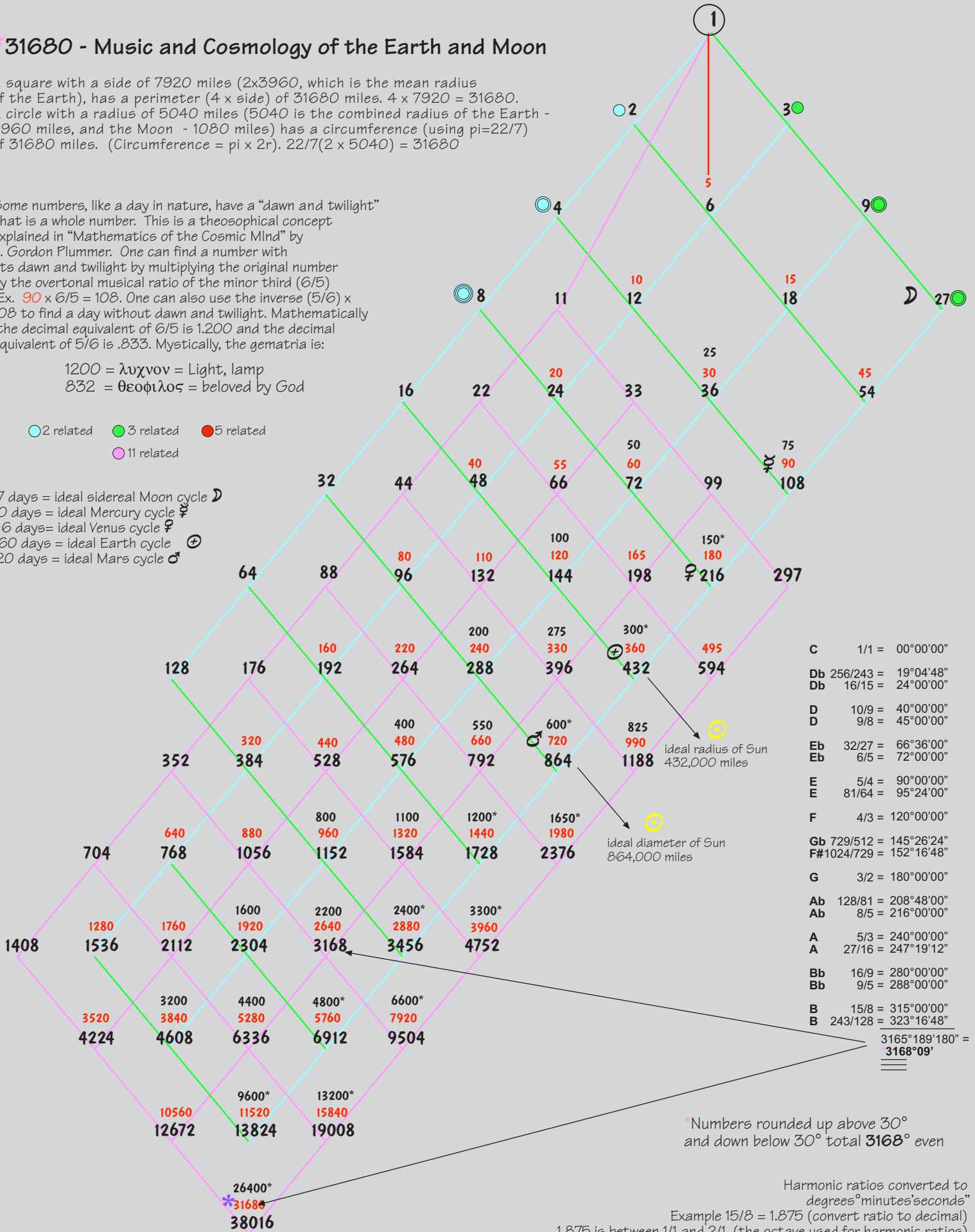
A square with a side of 7920 miles (2x3960, which is the mean radius of the Earth), has a perimeter (4 x side) of 31680 miles. $4 \times 7920 = 31680$.
 A circle with a radius of 5040 miles (5040 is the combined radius of the Earth - 3960 miles, and the Moon - 1080 miles) has a circumference (using $\pi=22/7$) of 31680 miles. (Circumference = $\pi \times 2r$). $22/7(2 \times 5040) = 31680$

Some numbers, like a day in nature, have a "dawn and twilight" that is a whole number. This is a theosophical concept explained in "Mathematics of the Cosmic Mind" by L. Gordon Plummer. One can find a number with its dawn and twilight by multiplying the original number by the overtone musical ratio of the minor third (6/5).
 Ex. $90 \times 6/5 = 108$. One can also use the inverse (5/6) x 108 to find a day without dawn and twilight. Mathematically the decimal equivalent of 6/5 is 1.200 and the decimal equivalent of 5/6 is .833. Mystically, the gematria is:

1200 = $\lambda\chi\nu\nu\omicron$ = Light, lamp
 832 = $\theta\epsilon\omicron\phi\iota\lambda\omicron$ = beloved by God

- 2 related
- 3 related
- 5 related
- 11 related

- 27 days = ideal sidereal Moon cycle ☾
- 90 days = ideal Mercury cycle ☿
- 216 days = ideal Venus cycle ♀
- 360 days = ideal Earth cycle ♁
- 720 days = ideal Mars cycle ♂



C	1/1 =	00°00'00"
Db	256/243 =	19°04'48"
Db	16/15 =	24°00'00"
D	10/9 =	40°00'00"
D	9/8 =	45°00'00"
Eb	32/27 =	66°36'00"
Eb	6/5 =	72°00'00"
E	5/4 =	90°00'00"
E	81/64 =	95°24'00"
F	4/3 =	120°00'00"
Gb	729/512 =	145°26'24"
F#	1024/729 =	152°16'48"
G	3/2 =	180°00'00"
Ab	128/81 =	208°48'00"
Ab	8/5 =	216°00'00"
A	5/3 =	240°00'00"
A	27/16 =	247°19'12"
Bb	16/9 =	280°00'00"
Bb	9/5 =	288°00'00"
B	15/8 =	315°00'00"
B	243/128 =	323°16'48"
		<u>3165°189'180" =</u>
		<u>3168°09'</u>

*Numbers rounded up above 30° and down below 30° total 3168° even

Harmonic ratios converted to degrees°minutes'seconds"
 Example $15/8 = 1.875$ (convert ratio to decimal)
 1.875 is between 1/1 and 2/1, (the octave used for harmonic ratios)
 $1.875 - 1 = .875$ (to get between 0 and 1)
 $.875 \times 360 = 315$ (to find the degree point of 15/8 on a circle)
 $315 = 315°00'00"$ (converting 315 into degrees°minutes'seconds")

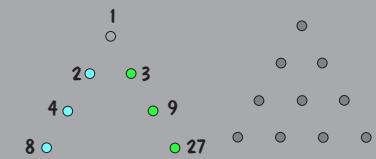
*31680
 38016

Gematria of Pythagoras and Jesus

This table grows out of the Pythagorean lambda & tetractys

Some numbers, like a day in nature, have a "dawn & twilight" that is a whole number. This is a theosophical concept explained in "Mathematics of the Cosmic Mind" by L. Gordon Plummer. One can find a number with its dawn and twilight by multiplying the original number by the overtone musical ratio of the minor third (6/5). Ex. $90 \times 6/5 = 108$. One can also use the inverse (5/6) x 108 to find a day without dawn and twilight. Mathematically the decimal equivalent of 6/5 is 1.200 and the decimal equivalent of 5/6 is .833. Mystically, the gematria is:

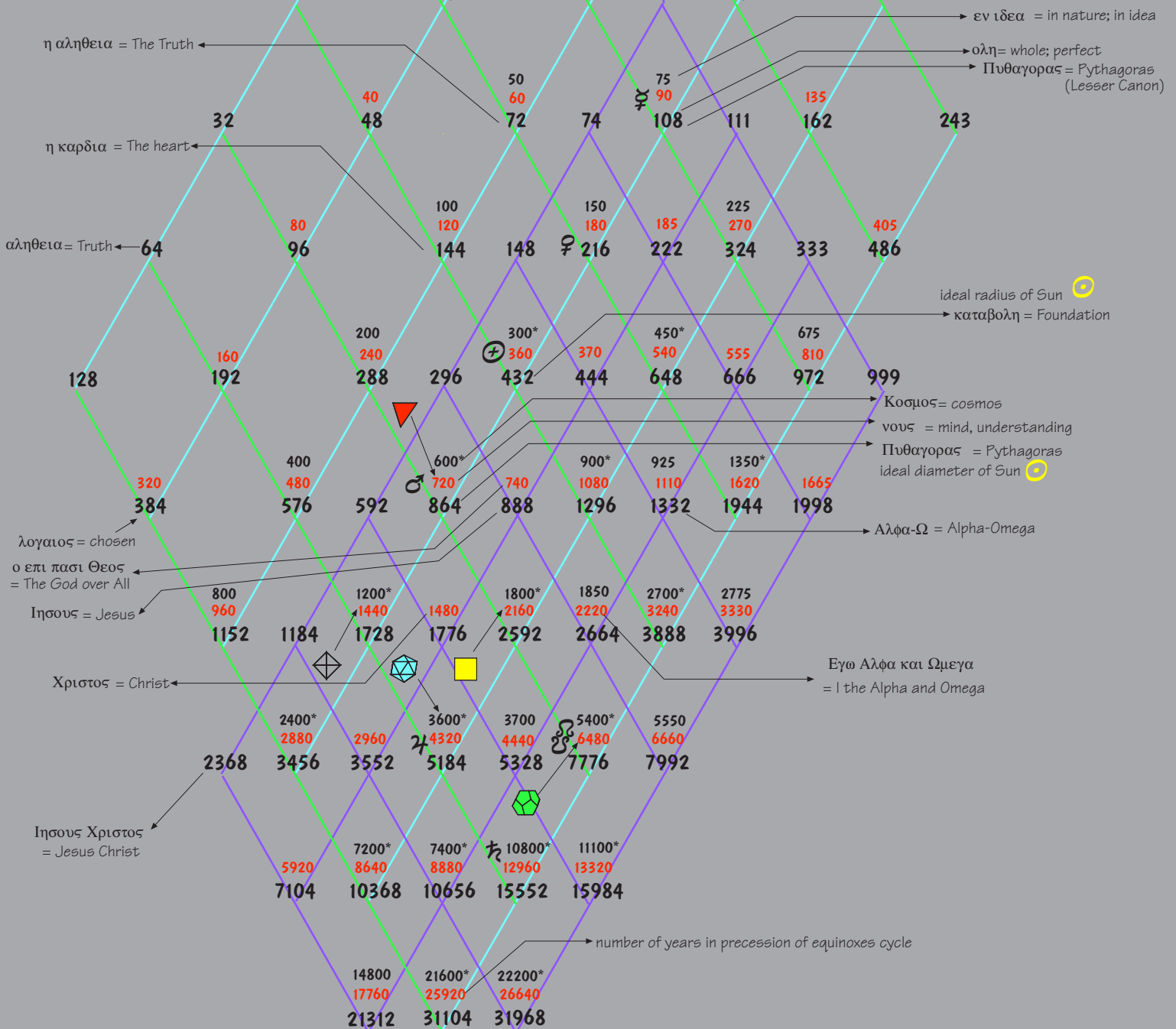
1200 = λυχνον = Light, lamp
832 = θεοφιλος = beloved by God



- icosahedron 3600°
- tetrahedron 720° (x2)
- dodecahedron 6480°
- octahedron 1440°
- cube 2160°

Total sum = 15120°

- 2 related
- 3 related
- 5 related
- 37 related



A Pythagorean Value of Pi

Added together, the numbers $864 + (864 \times 360) + (864 \times 360 \times 100) =$ a value of Pi accurate to 7 decimal places.

The Greek gematria for the name Pythagoras is 864.

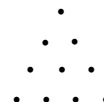
ΠΥΘΑΓΟΡΑΣ

864

The two most revered symbols of the Pythagoreans were the sphere and the Tetractys.



360



10

English letters P Y T H A G O R A S

Greek letters Π Υ Θ Α Γ Ο Ρ Α Σ

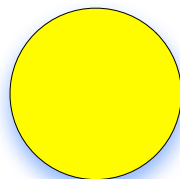
The Sphere

The Tetractys

Greek numeric values
for the letters of the
name Pythagoras

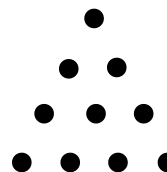
Π = 80
Υ = 400
Θ = 9
Α = 1
Γ = 3
Ο = 70
Ρ = 100
Α = 1
Σ = 200

864



Number of degrees in a circle

360



Number of dots

10

*100 = 10 x 10 (the Pythagorean tetractys tenfold)

$$864 \times 360 = 311,040$$

$$311,040 \times 100^* = 31,104,000$$

$$\begin{array}{r} 864 \\ 311,040 \\ 31,104,000 \\ \hline 31,415,904 \end{array}$$

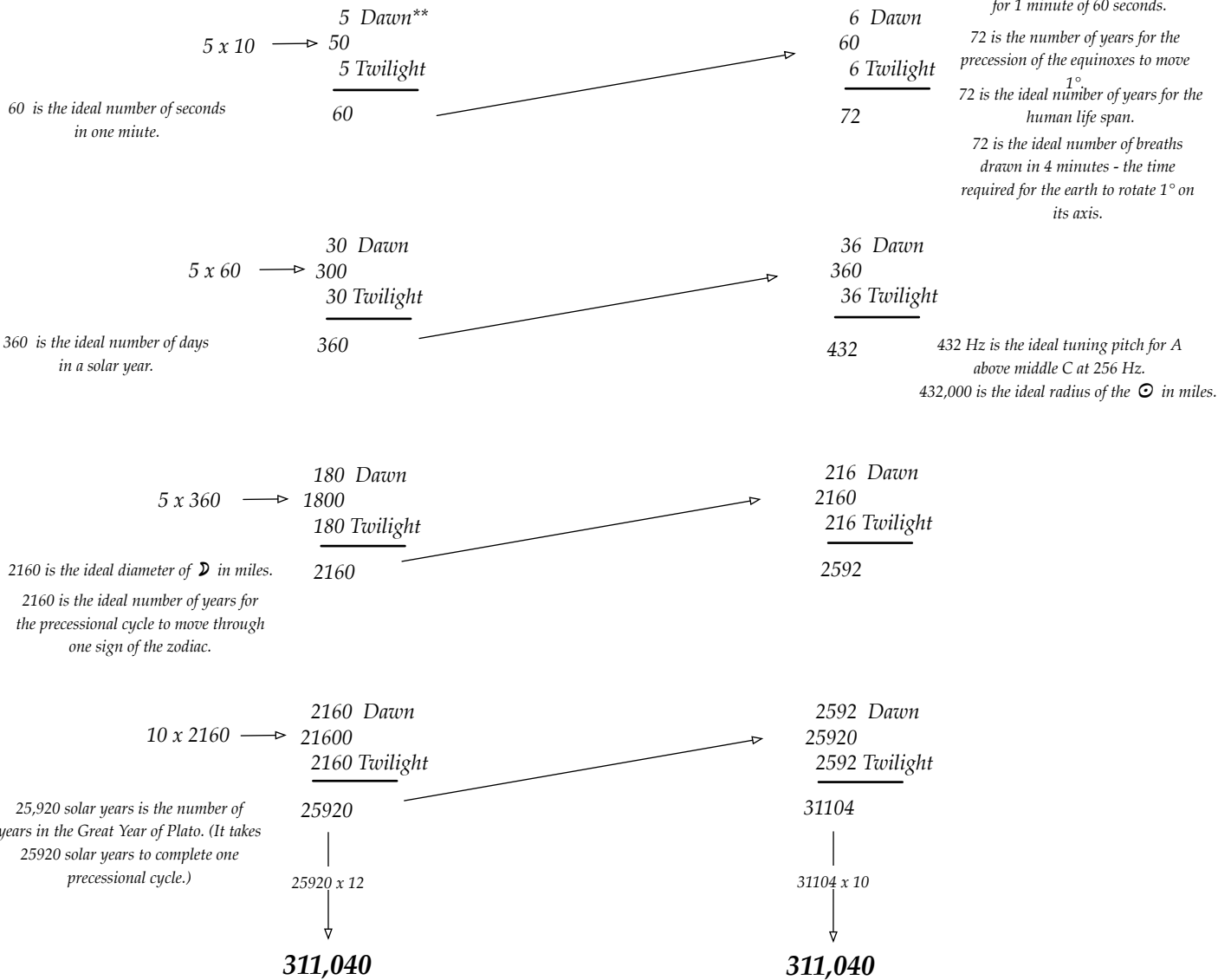
as a value of Pi to 7 decimals 3.1415904

actual value of Pi to 7 decimals = 3.1415926 . . .

value of Pi to 7 decimals at 355/113 = 3.1415929

Cosmic Cycles, Cosmic Numbers, and the Value of π^*

Cycles



$$2160 \text{ (diameter of } \mathcal{D} \text{ in miles)} \times 12 = \mathbf{311,040}$$

$$864,000 \text{ (diameter of } \odot \text{ in miles)} \times 360 / 1000 = \mathbf{311,040}$$

$$864,000 = \text{(diameter of the } \odot \text{ in miles)}$$

$$311,040,000 = 864,000 \times 360^\circ \text{ in a circle}$$

$$\mathbf{31,104,000,000} = 311,040,000 \times 100 \text{ (the tetractys } \times 10)$$

$$\text{Total} = 31,415,904,000$$

As a value of π to 10 places 3.1415904000

*Ideas on this page are adapted and expanded from *Mathematics of the Cosmic Mind* by L. Gordon Plummer and *The Kabala of Numbers* by Sepharial

**The dawn and twilight of a number are 10% of the number. 5 is 10% of 50 and is added before and after the number as dawn and twilight are added to the day. Mathematically, this can also be expressed as the musical ratio of 6/5, the harmonic minor 3rd. $50 \times (6/5) = 60$

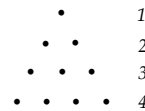
The Value of π , the Platonic Year, and the Hindu Yugas

Concepts adapted from *The Holy Science* by Swami Sri Yukteswar and *Mathematics of the Cosmic Mind* by L. Gordon Plummer

The Yugas ascending*		The Yugas descending	
(Iron Age) Kali Yuga	$100 + 1000 + 100 = 1200$ solar years	(Iron Age) Kali Yuga	$100 + 1000 + 100 = 1200$ solar years
(Bronze Age) Dwapara Yuga	$200 + 2000 + 200 = 2400$ solar years	(Bronze Age) Dwapara Yuga	$200 + 2000 + 200 = 2400$ solar years
(Silver Age) Treta Yuga	$300 + 3000 + 300 = 3600$ solar years	(Silver Age) Treta Yuga	$300 + 3000 + 300 = 3600$ solar years
(Golden Age) Satya Yuga	$400 + 4000 + 400 = 4800$ solar years	(Golden Age) Satya Yuga	$400 + 4000 + 400 = 4800$ solar years
	<u>12000 solar years</u>		<u>12000 solar years</u>
12000 + 12000 = 24000 solar years			

The Yugas ascending using the "108", (the sacred, mystical) form of 100		The Yugas descending using the "108", (the sacred, mystical) form of 100	
(Iron Age) Kali Yuga	$108 + 1080 + 108 = 1296$ solar years	(Iron Age) Kali Yuga	$108 + 1080 + 108 = 1296$ solar years
(Bronze Age) Dwapara Yuga	$216 + 2160 + 216 = 2592$ solar years	(Bronze Age) Dwapara Yuga	$216 + 2160 + 216 = 2592$ solar years
(Silver Age) Treta Yuga	$324 + 3240 + 324 = 3888$ solar years	(Silver Age) Treta Yuga	$324 + 3240 + 324 = 3888$ solar years
(Golden Age) Satya Yuga	$432 + 4320 + 432 = 5184$ solar years	(Golden Age) Satya Yuga	$432 + 4320 + 432 = 5184$ solar years
	<u>12960 years</u>		<u>12960 solar years</u>
12960 + 12960 = 25920 solar years			

*Whether using 100 or 108 as the unit, the concept of the Pythagorean tetractys (1 + 2 + 3 + 4) is common to both



25920 years is "The Great Year of Plato"

$25920/12 = 2160$ solar years = **Platonic month.** (2160 is also diameter of moon.)

$2160/30$ (days in a month) = 72 solar years = **Platonic day.**
 (72 is the number of solar years for the precession of the equinoxes to move 1°.)
 (72 is the ideal human pulse rate for 1 minute of 60 seconds.)

$72/24$ (hours in a day) = 3 solar years = **Platonic hour.**
 3 solar years = 3×360 days = 1080 days = Platonic Hour (1080 is the ideal radius of the moon in miles.)

$1080/60$ (minutes per hour) = 18 days = **Platonic minute.**
 18 days \times 24 hours = 432 hours (432,000 is the ideal radius of the sun in miles.)

$432/60 = 7.2$ hours = **Platonic second.**

8,640,000,000 solar years = 1 Brahmanic day (360 \times 24000 \times 1000)

3,110,400,000,000 solar years = 1 Brahmanic year (25920 \times 12 \times 1,000,000)

311,040,000,000,000 solar years = 100 years of Brahma or Age of Brahma (duration of the solar system in ancient Brahmanic Tables)

8,640,000,000
 3,110,400,000,000
311,040,000,000,000
 314,159,040,000,000

as a value of π to 14 decimals

3.14159040000000

The Value of π and the Brahmanic Tables

“The value of π , which expresses the relations of the circumference to the diameter of a circle, was concealed in the great cycle known as the Age of Brahma, 311,040,000,000,000 years. This age is one hundred years of Brahma, and a Brahmic year is therefore 3,110,400,000,000 solar years. This number is again divided by 360, which gives the value of the Brahmanic Day or 8,640,000,000 years. Then by adding together the value for the age, year and the day of Brahma, we have 314159, etc., which is the familiar value of π or very nearly, 355 divided by 113.”

From *The Kabala of Numbers* by Sepharial, p.12.

“... 311,040,000,000,000, the number of years in the Life of Brahma, which represents the duration of the Solar System as given in the ancient Brahmanical Tables, dating back many centuries before Christ.” From *Mathematics of the Cosmic Mind* by L. Gordon Plummer, p. 34.

$$86,400 \text{ seconds} = 24 \text{ (hours in a day)} \times 60 \text{ (minutes in an hour)} \times 60 \text{ (seconds in a minute)}$$

$$\begin{aligned} 86,400 \text{ seconds} &= 1 \text{ solar day} \\ 1440 \text{ minutes} &= 1 \text{ solar day (86,400/60 seconds per minute)} \\ 24 \text{ hours} &= 1 \text{ solar day (1440/60 minutes per hour)} \end{aligned}$$

$$31,104,000 \text{ seconds} = 864,400 \text{ (seconds in a day)} \times 360 \text{ (days in a solar year)}$$

$$\begin{aligned} 31,104,000 \text{ seconds} &= 1 \text{ solar year} \\ 518,400 \text{ minutes} &= 1 \text{ solar year (31,104,000/60 seconds per minute)} \\ 8640 \text{ hours} &= 1 \text{ solar year (518,400/60 minutes per hour)} \\ 360 \text{ days} &= 1 \text{ solar year (8640/24 hours per day)} \end{aligned}$$

$$3,110,400,000 \text{ seconds} = 31,104,000 \text{ (seconds in a year)} \times 100 \text{ (100 solar years)}$$

$$\begin{aligned} 3,110,400,000 \text{ seconds} &= 100 \text{ solar years} \\ &\text{(read as three billion, one hundred ten million four hundred thousand seconds)} \end{aligned}$$

	86,400 seconds in a solar day
311,040,000,000,000 seconds = 1000 solar years	31,104,000 seconds in a solar year
(read as three trillion, forty billion seconds)	3,110,400,000 seconds in a 100 solar years
	<hr style="width: 100%; border: 0.5px solid black;"/> 3,141,590,400 π

as a value of Pi to 9 decimal places

3.141590400