This Part two of a two part pdf.
The first pdf is titled:

Teotihuacan City Grid 15.5 and 16.5 degrees Mystery Solved, 21st Century Khufu Hexagonal and Octagonal Pyramids Ancient Square Root Two

IMPORTANT REFERENCE TABLES

1872000 = Mayan Long Count = 13 x 144,000
1872000 / by 585 Venus synod = 3200
1872000 / 225 Venus sidereal = 8320
1872000 / by 117 Mercury synod = 16000
1872000 / by Earth civic calendar 360 = 5200
1872000 / by 365.625 Earth = 5120
1872000 / by 780 Mars synod = 2400
1872000 / by 4333.33333~ Jupiter sidereal = Egyptian number 432
1872000 / by 702 Mayan Dresden Codex = 2666.6666~

Mayan Long Count Venus synod 585 / by Earth 365.625 = 1.6
Ancient Calendar and NASA Venus synod 584 / by Earth 365 = 1.6

Mayan Dresden Codex 702 / by Mayan Long Count Venus synod 585 = 1.2
Universal Harmonic Pi, or uPi / by Phi squared = 1.2 = {6 / 5}.
10 uPi = 12 Phi squared, and uPi = 3.141640787~ rounded

Ancient Egyptian Pi = {22 / 7} = 3.142857 142857 142857~
4 / by Ancient Pi = {14 / 11} = tangent of Khufu Pyramid slope 51.84277~

KHUFU PYRAMID 756 feet:
7560 = 20 x 378 Saturn synod = 21 x 360 Earth Calendar
7560 = 33.6 x 225 Venus sidereal
7560 = 11 x 687.27 27 27~ Mars and 687.27 27 27~ = 33.3333~ Royal Cubits

The ROYAL CUBIT = {1134 / 55} = 20.618 18 18 18~

KHUFU PYRAMID 756 feet x 12 inches = 9072 inches.
9072 = 440 cubits x {1134 / 55}
4 sides x 9072 inches = 36288

9 x 8 x 7 x 6 x 5 x 4 x 3 x 2 x 1 = 362880
362880 / by Solfeggio 528 = Mars 687.27 27 27~ ,or use mile 5280.

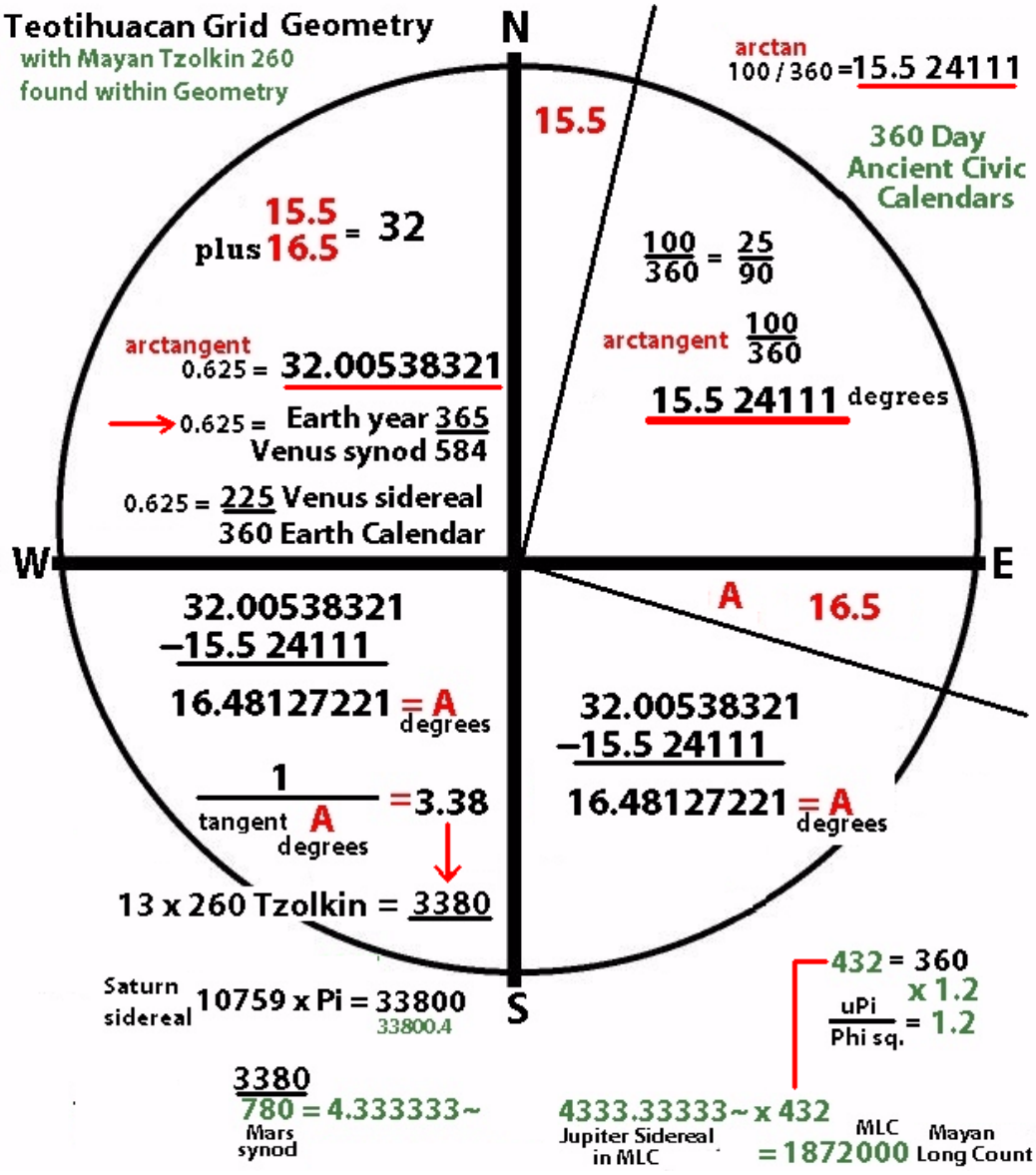
Ancient Egyptian Square Root Two = {99 / 70} x {140 / 99},
1.414 285714 285714~ x 1.414 14 14 14~

Calendar 360 x 1.414 14 14 14~ = 509. 09 09 09~ = {5600 / 11}.
Calendar 360 x 1.414 285714~ = 509.142857~ = {3564 / 7}.

509. 09 09 09~ x 509.142857~ = 259200 = 360 x 720

Khufu Pyramid slope tangent {14 / 11} squared x Ancient Pi = {56 / 11}.
{56 / 11} = 5.09 09 09 09~

The Diagram below displays the 15.5 and 16.5 degree angles,
and SPECIFICALLY the process of the ADDITION of those angles to the
32 degree angle shown which is the arctangent of fraction {5 / 8} = {0.625}.
Fraction {5 / 8} = {0.625} = Earth year 365 / by Venus synod 584.
or that also equals:
the calendar count of Venus sidereal 225 days / by Earth 360 Calendar count.
A sidereal is the solar orbit period of the planet.



The mathematics are undeniably precise and beyond the scope of random chance or coincidence, and the resultant display offers a distinct approach through the geometry to identify Intent.

Teotihuacan Universal Harmonic Master Code

Part 2 of the Teotihuacan City Grid 15.5 degrees Mystery Solved

The Teotihuacan angles are **15.524111** and **16.48127221** degrees

These angles have **opposite angle counterparts in a 90 degree** angle, which can be represented as arctangents with fractions:

arctangents {**360 / 100**}, and then {**100 / 360**} = **15.524111** degrees

arctangents {**338 / 100**}, and {**100 / 338**} = **16.48127221** degrees

The components here are **338** and **360** both of which have calendar applications used in mesoAmerican culture,
and with **338** being a direct component of Mayan **260** Tzolkin, conversion into Egyptian mathematics is simple:

360 ancient Earth civic calendar = **12 x 30**
260 Tzolkin spiritual calendar = **13 x 20**
260 Tzolkin x 13 = 3380 ←---→ 338 x 10.

Using civic calendar 360 with Tzolkin 260 reveals unique fractional equivalents:
360 / by 260 = 1080 / by 780 Mars synod

{**360 / 260 Tzolkin**} = {**1080 / 780 Mars synod**}

Egyptian **25920 / by** {**1080 / 780** Mars synod} = **1872**0 = $\frac{\text{Mayan Long Count}}{\text{divided by } 100}$ **1872000**
360 x 72

1080 = {1100 / 21} Royal Cubits 1080= total degrees in the octagon

260 Tzolkin x 360 Calendar = 93600 = 120 x Mars synod 780
MLC or Mayan Long Count 1872000 = 93600 x 20
MLC Jupiter
93600 / by 4333.333333~ = 21.6 -------→ 2160
sidereal in days

2160 = 6 x 360 = 33.3333~ x Ancient Pi x Royal Cubit
2160 = Khufu Pyramid Mars sidereal 687.27 27 27~ x Ancient Pi

arctangents {360 / 100}, and then {100 / 360} = **15.524111** degrees.

arctangents {338 / 100}, then {100 / 338} = **16.48127221** degrees.

These angles are added together become: **32.00538321** degrees.

Tangent **32.00538321** degrees = **0.625** = {**5 / 8**}.

0.625 = 365 Earth / **by 584** Venus synod.

0.625 = 225 Venus sidereal / **by 360** Earth Calendar

Ancient **360** Calendar count in any global culture used **225** days for the Venus sidereal. NASA has this value at 224.7 days.

Mayan Long Count 1872000 / by 225 Venus = 8320 cycles.

Now to attain the opposite angle to **32.00538321** degrees,
would simply use the reverse arctangent,
or in essence just reverse the fractions to apply the arctangent to.

584 Venus synod / by **365** Earth = **1.6** = {**8 / 5**}
360 Earth Calendar / by **225** Venus sidereal = **1.6**

Mayan Long Count values:
Venus synod 585 / by Earth 365.625 = 1.6

Arctangent 1.6 = 57.99461679 degrees

Mayan Long Count
1872000 / by Earth 365.625 = 5120 = 20 x 16 squared**.**
Therefore with **365.625** as a count vehicle:
Every 100 years of count you subtract **40** days to balance.

The objective here is to show how **1.6** can be represented as an arctangent,
and as a cosmologic calendar count vehicle as **16.**

The diagram above shows how Mayan Long Count Venus synod **585** days
With a Long Count Earth year value of **365.625** accounts,
in relation to the true Venus synod of **584** days, with an Earth year value of **365**.
These are calendar accounting techniques, and don't forget that the actual earth years is 365.25 days. Mayan Long Count is fundamentally different than the Mayan Calendar Round which uses 365 and 584.

584 Venus synod / by **365** Earth = **1.6**
360 Earth Calendar / by **225** Venus sidereal = **1.6**

1.6 is simply the true number sequence 16 for calendar functions.

This has it's own function in calendar often seen in ancient Sumerian cylinder seals as the **16** pointed star, or in the Grand Masonic Lodge Codes architecture as a **16** pointed star.

Often called the Great Platonic Age, the number **25920** is also a very important Egyptian **360** calendar count value **25290 = 360 x 72**.

Table below shows 360 Calendar count with 16 and calendar Count Phi 1.62:

Egyptian number **25920 = 16 x 1620 = 360 x 72.**

162 = 3 x 6 x 9
1620 = 360 day Earth Civic Calendar Count Phi **1.62 x 1000**

360 / by 1.62 = 222.22222~ = {**2000 / 9**}
222.22222~ x Ancient Sqrt. Two 1.414 285714~ = 100 Ancient Pi

Calendar Count Phi **1.62** was approached and reviewed earlier in the first pdf.

MLC 1872000 / by 4333.3333~ day Jupiter sidereal = **432** cycles.
25920 = 60 x 432.

Jupiter sidereal
4333.33333~ x 1.62 = 7020 = 10 x 702 Mayan Dresden Codex.
Mayan Astronomical Constant

25920 = 16 x 1620
16 x Ancient Pi = 88 day Mercury sidereal **x** {**4 / 7**}**.**
= **88 x** {**Ancient Pi / 2, minus 1**}

16 = 5280 x {**360 Earth Calendar / by 378 Saturn synod**}
divided by 100 Ancient Pi

Obviously the mile value **5280** is used in the equation,
And one can also use Solfeggio **528,** by using 10 Ancient Pi in the denominator.

On the next page the Masonic Code arches are presented to augment the usage of 16 in calendar count applications.

Masonic Code Arches exactly as they appear in the Grand Masonic Lodge, in the Norman Hall room Philadelphia, one arch on top of the other.
16 pointed Star and 17 pointed arch are identical to Sumerian cylinder seal.
Note that Stonehenge has the **56** Aubrey Poles.

The Masonic Upper Arch at 12 oclock position are the 3 numbers **11, 16, and 56:**

{**11 x 16**} **/ by 56 = Ancient Pi** Ancient Egyptian Pi = 22 / 7

{**56 / 11**} = **5.09 09 09 09~**

5.09 09 09 09~ = {14 / 11} squared x Ancient Pi
Khufu Pyramid slope tangent squared x Ancient Pi

16 = Ancient Pi squared, then times {**14 / 11**} **squared.**
{**Khufu Pyramid slope tangent squared**}

Correlating decimal variations such as 16 and the arctangent 1.6 is clearly shown by the simple relationship of the fractions: {**100 / 360**} = { **1 / 3.6**}.

Teotihuacan Universal Harmonic Master Code

Teotihuacan:
arctangents {360 / 100} and {100 / 360} = **15.524111** degrees.

arctangents {338 / 100} and {100 / 338} = **16.48127221** degrees.

These angles are added to become: **32.00538321** degrees, or arctan {5 / 8}:
Thus our two angles are the arctangents of {5 / 8} and {8 / 5}.

16 / 10 = 1.6 = 8 / 5
Arctangent 1.6 = 57.99461679 degrees,

57.99461679 degrees + **32.00538321** degrees = **90.**

sine 57.99461679 degrees = X

{1 / X} squared = 1.390625
THEN divided by 225 Venus sidereal
!------→ = 0.006180555555~ ←----!

Or simply:

{1 / cosine **32.00538321**} **squared** = **1.390625**

1.390625 ----------→ 1390625 = 15625 x 89 ←-- root value.

0.6180555555~ = 89 / 144 **Mayan Baktun = 144,000**
144 = 12 squared, and 12 = 10uPi / by Phi squared.

THUS: through the sine or cosine process is revealed the:
"Ancient Egyptian Phi squared system" based on **2.618 18 18 = {144 / 55}.**

89 / 144 **233 / 144** **377 / 144**
0.6180555555~ + 1 = 1.6180555555~, then **+ 1 = 2.61805555~**
0.618 18 18 18~ +1 = 1.618 18 18 18~, then **+1 = 2.618 18 18 18~**
34 / 55 **89 / 55** **144 / 55**

1.618 18 18 18~ / by 0.618055555~ = 2.618 18 18 18~ ←-------

With this process the unique convergent Pi value is achieved:

0.6180555555~ + 1 = 1.6180555555~
then:
1.6180555555~ + 1 = 2.61805555~
then x 1.2 = 3.14166666~ = {**377 / 120**}.

Thus Convergent Pi value **3.14166666~** emerges from this framework, and that also works with **360** Calendar Count and equals:

1131 / by 360 Calendar **= 3.14166666~** Pi value.
1131 = hypercube nets 261 x 4.3333333~
4333.3333~
Mayan Long Count Jupiter sidereal

1131 = 13 x 87
87 x 1.333333~ = 116 Mercury synod
Khafre Pyramid slope tangent

{**87 / 70**} = Mark Lehner measured Menkaure pyramid slope tangent.

Now we come to the final step in this part of the process.

We see that the Egyptian value **0.61805555~** emerges from the math.

The process I use with the sines, cosines and tangents of angles inversed and squared is unique to applications of planetary time lines with decimal variation many times,
is a method to submit the number properly into that sine, cosine and tangent system so as to ferret out Intent of harmonic cycle in the usage of such planetary accounting by ancient cultures.

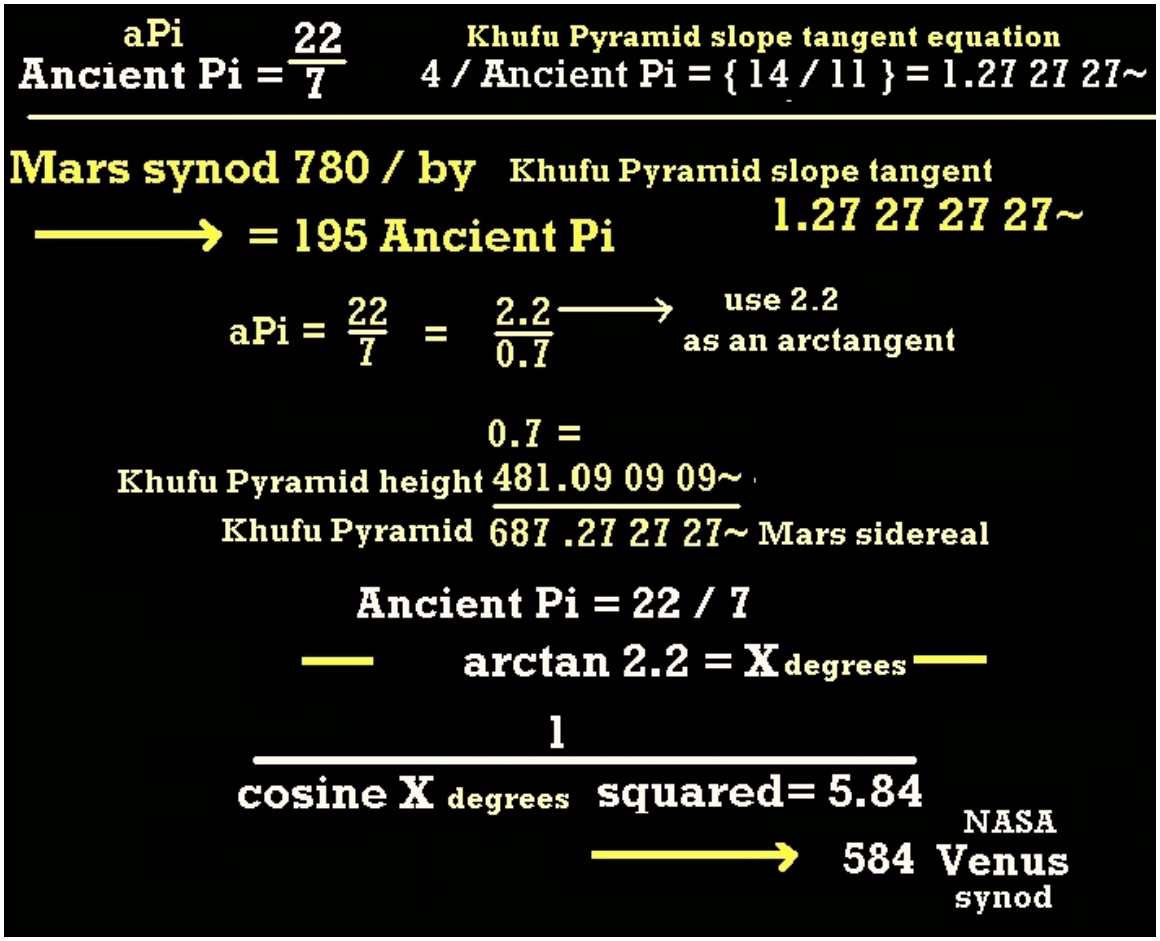
I will submit two processes, one with modern geometry and the other with Ancient Pi to prove my process:

In modern geometry:
The octagon has 8 triangles of **67.5--45--67.5 degrees.**
Thus:
There are **16** octagonal angles of **67.5 degrees = 1080 degrees**

{**1 / cosine 67.5**} **squared = 6.828427125 = Sqrt. 8 +4**

Amazingly a function of square root 8 emerges as functional process.
Note that the total degrees in an octagon are 1080 degrees.

In the next page this process is transferred to Ancient Egyptian Pi.



The resultant value **1.390625** emerged from this process just earlier,
From this we arrived at the value **0.61805555~** using above process and with the Venus sidereal: **1390625 / 225 = 6180.55555~.**

The Teotihuacan Master Code:

We will apply my process to the **Sine** of the sum of the Teotihuacan angles **15.52411** and **16.48127221** = **32.00538321** degrees.

{**1 / by sine 32.00538321** degrees} **squared = 3.56**

3.56 ----→ 356 = 4 x 89

89 is the root value of 356.

Now use both values achieved from sine and cosine:

89 / by 0.61805555~ = 144 = Mayan Baktun / 1000.

144 = 12 x {10 uPi / by Phi squared}

inverse 144 = Sqrt. {0.0833333~}

Sqrt.{**0.0833333~**} is the shortest length is the Mars Pentad Mounds

Though this is somewhat redundant above, the idea is show how the cumulatively represented mathematics as a whole can be found within the sine and cosines of angle **32.00538321** degrees = arctangent {**Earth 365 / by Venus 584**}.

The Teotihuacan Universal Harmonic Master Code:

Teotihuacan City Grid Angles 15.5 and 16.5 deg

36 and 54 are pentagonal Phi based

arctangent $\frac{100}{360}$ = 15.524111 deg.
Ancient Civic Calendar

arctangent $\frac{100}{338}$ = 16.48127221 deg.
13 x 260 = 3380 Tzolkin

$\frac{15.5 + 16.5}{32}$

15.524111 plus 16.48127221

degrees tetrahedral
36 minus 16.5 = 19.5
54 plus 16.5 = 70.5
36 and 54 pentagonal Phi based

→ 32.00538321 deg. = arctangent 0.625

5 x 584 Venus synod = 8 x 365 Earth = arctangent $\frac{5}{8}$ = arctan $\frac{365}{584}$

→ 32.00538321 deg. + 45 deg. (arctangent 1.0) = 77.00538321 deg.

arctangent 4.3333333~ = 77.00538321 deg.

Mayan Long Count 1872000 / by 432 = 4333.33333~ Jupiter sidereal in days

432 = 6.66666~ Ancient Pi x Royal Cubit

51.84277341 deg.
Khufu Pyramid slope tangent

→ 32.00538321 deg. + arctangent $\frac{14}{11}$ = 83.84815662 deg.

arctangent 9.2777777~ (3340 / 360) = 83.84815662 deg.

The Mars Venus synod of 334 days / by 9.277777~ = 36

or 10 Mars-Venus synods / by 9.277777~ = 360

→ 32.00538321 deg. + arctangent 1.4 (54.46232221) = 86.46770542 deg.
Bent Pyramid slope tangent

arctangent 16.2 = 86.46770542 deg.
10 x Calendar Count Phi 1.62 = 16.2

→ 32.00538321 deg. + 30 degrees = 62.00538321 deg.

arctangent 1.881152826 = 62.00538321 deg.

1.881152826 x 365.25 = 687.09 Mars sidereal
365.2 = 686.99

Ancient Pi = Egyptian Pyramid Pi = $\frac{22}{7}$ — $\frac{2.2}{0.7}$ — use as arctangent — ratio of Mars sidereal to Khufu Pyramid height

arctangent 2.2 = A degrees → {1 / cos A} Squared = 5.84
584 Venus synod

→ 32.00538321 deg. + arctangent 2.2 deg (97.56142843) = -7.5333333~ arctangent

7.5333333~ x 360 Calendar = 2712 = 24 x 113 ←
7.5333333~ x 225 Venus sidereal = 1695 = 15 x 113 ←
355 / by 113 = 3.14159292

7.5333333~ x 780 Mars synod = 5876 = 1.2 x 1.13 x 4333.3333~ Jupiter sidereal

Thus in the table diagram on the previous page a series of unique equations emanate from the Teotihuacan master angle of:
32.00538321 degrees = arctangent {**Earth 365 / by Venus 584**}.

On the upper right is shown how the 16.5 degree Teotihuacan angle will translate into the important tetrahedral and pentagonal phi angles!
It offers proof that they were aware of these important angles,
and that the **16.5** degree angle is certainly multifaceted in design and intent.

The first equation adds the standard 45 degree angle to 32.00538321 degrees.
The **45** degree angle in modern geometry is exampled by:
Sine and Cosine both equal modern **Sqrt. 2 / by 2.**
The tangent of **45** degrees = **1.**
Without question the result is far beyond the scope of random chance.
The tangent of the resultant angle is **4.3333333~,**
which correlates directly to the Mayan Long Count Jupiter sidereal in days:
MLC 1872000 / by Jupiter sidereal 4333.33333~ = Egyptian number 432.
Egyptian number 432 = 6.6666666~ Royal Cubits x Ancient Pi.
Egyptian number 432 = {20 / 3} Royal Cubits x Ancient Pi.

The second equation adds the Khufu Pyramid slope angle to the master angle 32.00538321 degrees.
The **Mars Venus synod** is **334** days calculated by NASA equations and rounded.
Equation: **1 divided by** { 1 / Venus 224.7 sidereal **minus** 1 / Mars 687 sidereal}.
NASA equation: 333.915, and they round to 334 for publication purposes.
In ancient calendar count this value is **334** days as well.
Once again this is far beyond the scope of random chance.
In this equation the resultant arctangent = 9.2777777~ = 3340 / by 360.
Thus: that is 10 Mars – Venus synods divided by Earth 360 Calendar count.

The third equation uses Bent Pyramid tangent **1.4** = **54.46232221 degrees**:
32.00538321 plus 54.46232221 degrees = 86.46770542 degrees:
86.46770542 degrees = arctangent 16.2 ←----!
What are the odds of exactly ten times Calendar Count Phi **1.62** being there?
In tandem with all the other evidence mounting, this cannot be random chance.
1.62 as calendar count Phi is attached to 360 day calendar count:
360 / 162 = {20 / 9} = Ancient Pi / by Ancient Sqrt. 2 as {99 / 70 = 1.414 285714~}
3.6 / by 1.62 = {20 / 9} = 2.222222~
3.6 is the arctangent of the opposite angle to Teotihucan arctan {100 / 360}.

The fourth equation uses the 30 degree angle from the 30-60-90 triangle.
The angle tangent achieved is almost exact to the Mars to Earth sidereal ratio.
Once again this cannot be a coincidence.

The fifth equation reveals the presence of the important number 113.
This is because **113** is the basic denominator of the convergent Pi value:
355 / 113 = 3.14159292, where decimal **0.14159292 = 16 / by 113**.

Continued:
355 / 113 = 3.14159292, where decimal **0.14159292 = 16 / by 113**.

This offers evidence that the Master Code is aligned to this Pi value,
by virtue of the mathematics presented in the equation process,
which uses the Ancient Pi process of the numerator 2.2 applied as an arctangent.
This process is in the table immediately preceding this series of equations.
Note how the arctangent achieved of minus **7.5333333~** is then applied
to the pertinent planetary timelines to reveal the Convergent Pi value
denominator of 113.
The last line of the fifth equation is the multifaceted jewel:

The arctangent 7.5333333~ = 678 / 90.

7.3333333~ x Mars synod 780 = 5876 = 1.2 x 1.13 x 4333.333333~ ←----!
Dissecting this result in the right hand side of the equation:
1.2 = Universal Harmonic Pi / by modern Phi squared.
1.13 = 113 / 100
4333.333333~ = Jupiter sidereal in the Mayan Long Count.

The arctangent 7.5333333~ = 6780 / by 900.
Note:
6780 / by Mars 687 = convergent modern Pi squared.
Using the exact NASA Mars sidereal 686.98:
6780 / by 686.98 = 3.141541492 squared.

Another amazing convergence is **ADDING** the **32.00538321 degrees**
to the **pentagonal phi** angle **36** degrees, ←-------! Cosine 36 = Phi / 2,
to equal **68.00538321** degrees.
tangent **68.00538321** degrees = **2.475756536 ←----- note value.**

2.475756536 / by modern Pi = 0.788057781
arcsine 0.788057781 = 52.00437677 deg. ←---- note.

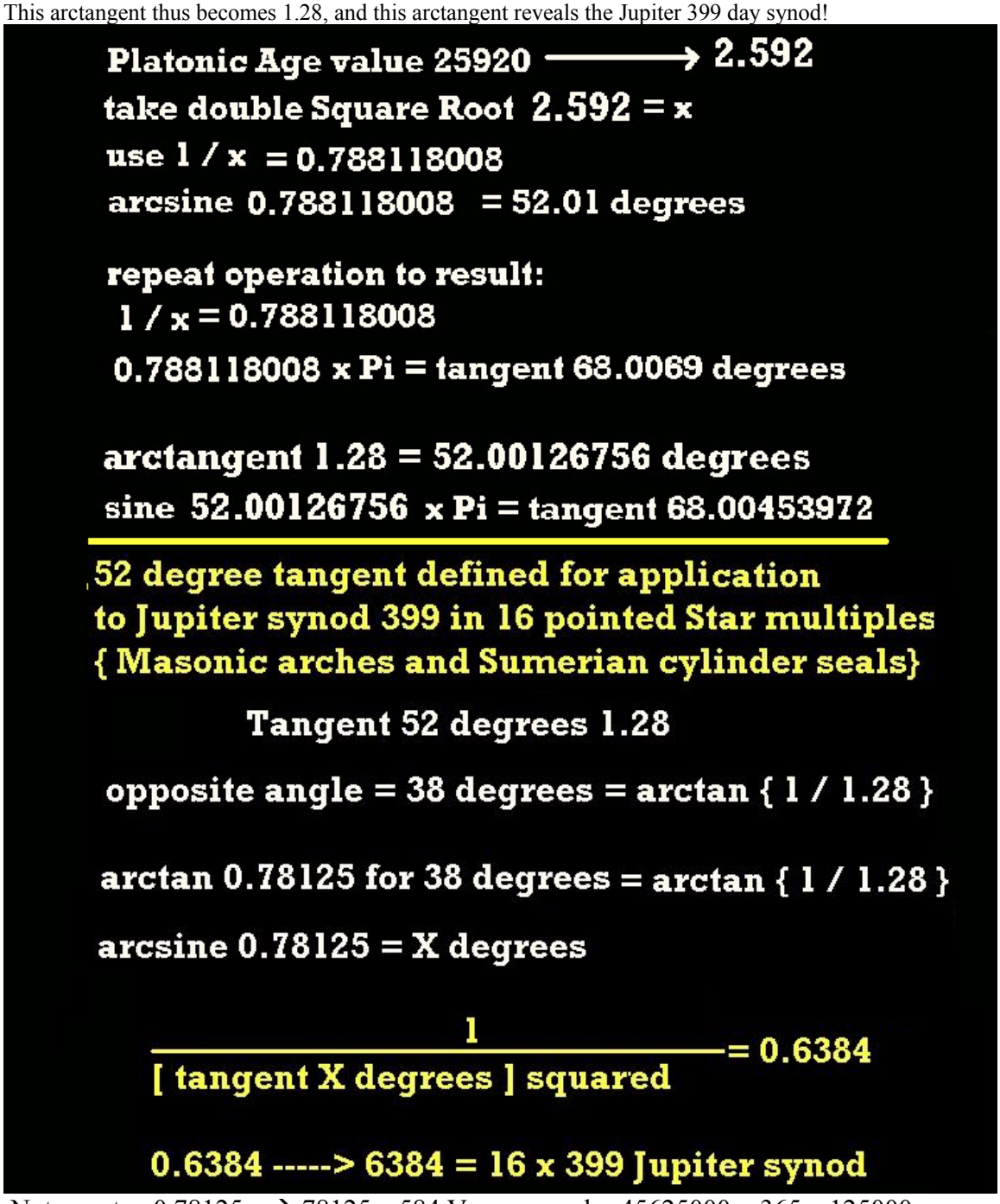
arctangent **52.00437677 deg** = **1.280143185**
compare to equation using modern values:
{**Sqrt. of 10 Phi / by Pi**} = **1.280394935 = tangent 52.00984236 degrees.**

Using Ancient Egyptian values in the above equation:
Sqrt of 890 / 55 22 / 7
{ **Sqrt. of 16.18 18 18 18 18~ / by Ancient Pi** } = **1.27993825 ←----note value.**

Arctangent 1.27993825 = 51.9999 2655 degrees.

The 68 and 52 degree angles will be defined in my next pdf in detail,
called Advanced Universal Harmonic Code Mathematical Systems.

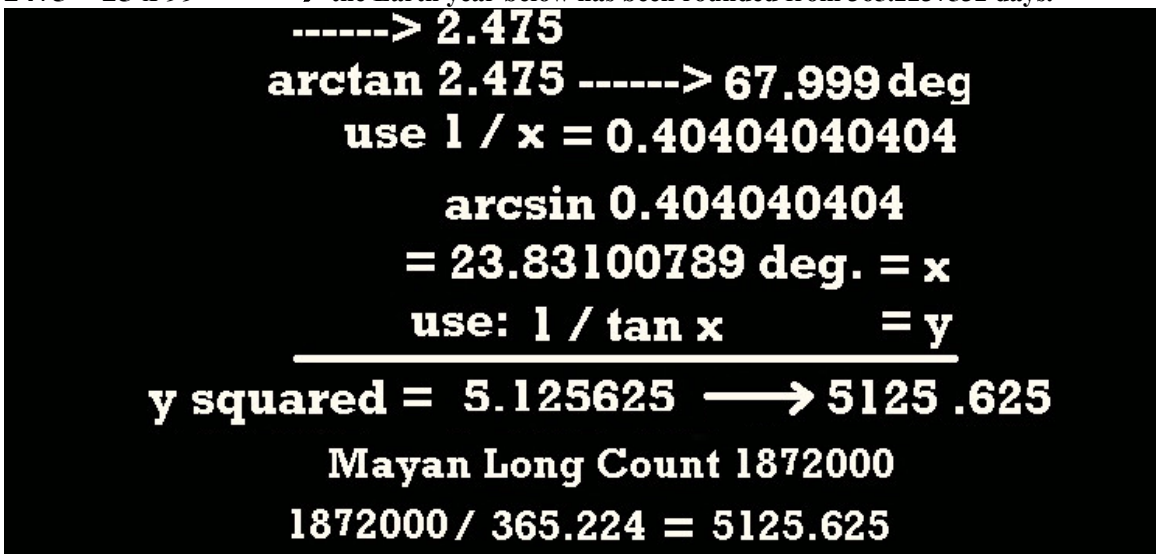
The unusual harmonics of the 68 degree tangent exposed by the usage of the
Teotihuacan arctangent{365 Earth / by 584 Venus} = 32.00538321 degrees,
added with the pentagonal Phi angle of 36 degrees to equal 68 degrees,
reveals a connection by the usage of Pi values to the 52 degree angle shown above.
When using such operations that exhibit extreme Convergence Dynamics,
one needs to observe arctangents that are convergent and operate within the
Egyptian mathematical systems. A 52 degree tangent is found with the number 128 = 8 x 16,
correlating the 16 pointed star in the Masonic Codes, and the Sumerian cylinder seals.
This arctangent thus becomes 1.28, and this arctangent reveals the Jupiter 399 day synod!



Note: arctan 0.78125 --→ 78125 x 584 Venus synod = 45625000 = 365 x 125000

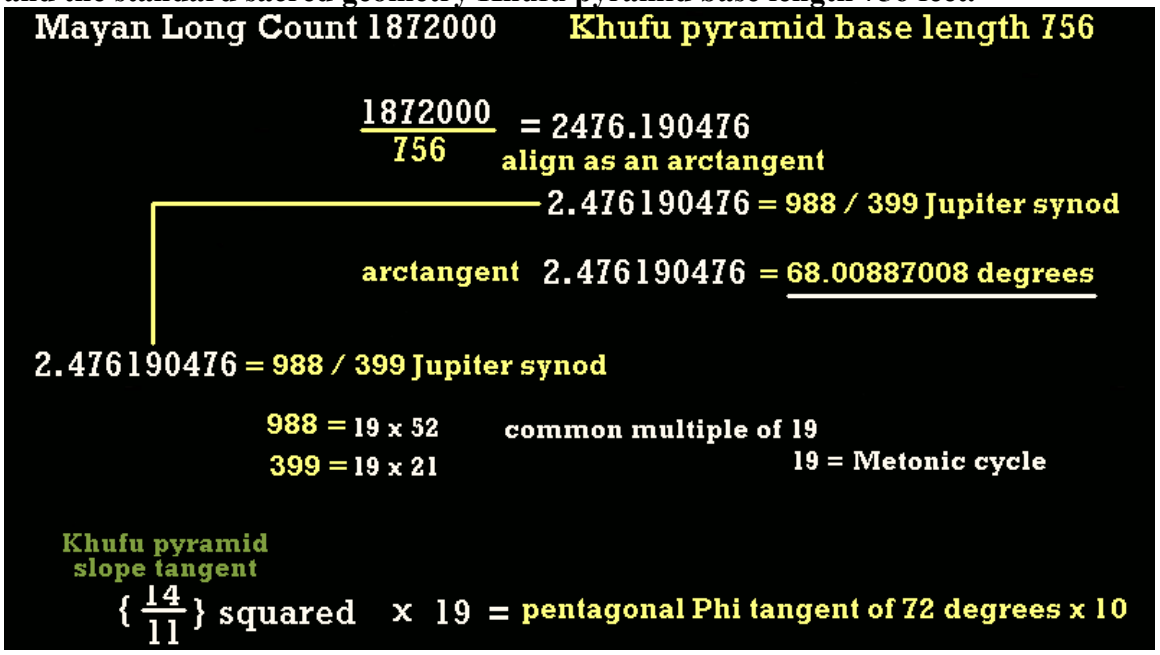
This beautiful combination of the 52 and 68 angles has many counterparts:

The 68 degree angle can be aligned as well as the arctangent 2.475 ←-----.
2475 = 25 x 99 --------→ the Earth year below has been rounded from 365.2237532 days.



1 / 2.475 = 0.40 40 40 40~ = 40 / 99

To finish with this series of 52 and 68 degree angle convergences found by adding the Teotihuacan master angle 32.00538321 to pentagonal Phi 36 deg., we will use:
The Mayan Long Count 1872000
and the standard sacred geometry Khufu pyramid base length 756 feet.



The 68 and 52 degree angles will be defined in my next pdf in detail, called Advanced Universal Harmonic Code Mathematical Systems.

The Mars and Saturn Sidereal in Teotihuacan Master Code

And other important angle combinations

On the next page is one of the best examples of cosmological crossover
in ancient mathematical systems. This implies that all the ancient cultures were
basically aware of each others mathematical approaches to planetary accounting,
their various associated fractional Pi and Phi values,
and to how that accounting can be facilitated through the angle geometries,
to be presented in pyramid constructs, city grids, Stonehenge, and more.
It isn't that Pi as modern Pi, is the exclusive grand pinnacle of focus in ancient
mathematics applied to pyramid or cultural megalith or metropolitan design.
Quite to the contrary, the application of what I call:
Pyramid Pi values,
which really have nothing to do with modern Pi applications,
and are almost exclusively planetary time line accounting vehicles.
In other words these ancient "Pi values" have as much if not more importance
than the concept of modern Pi did to ancient mathematicians.
Ancient man did not need modern Pi, he had fractions like {**355 / 113**},
and {**377 / 120**} or an ancient Babylonian possiblility of {**84823 / 27000**}.
Of those {**377 / 120**} may be the most practical because of this:

{**377 / 120**} = **3.141666666~** = {1131 / 360}.
3.141666666~ x {**5 / 6**} = **2.6180555555~**
{**5 /6**} = {**Phi sq. / uPi**} **2.6180555555 x 9 = 23.5625**

Teotihuacan 32.00538321 degree tangent **0.625 x 377 = 235.625**

{**5 / 8**} **= Earth 365 / 584 = 0.625**

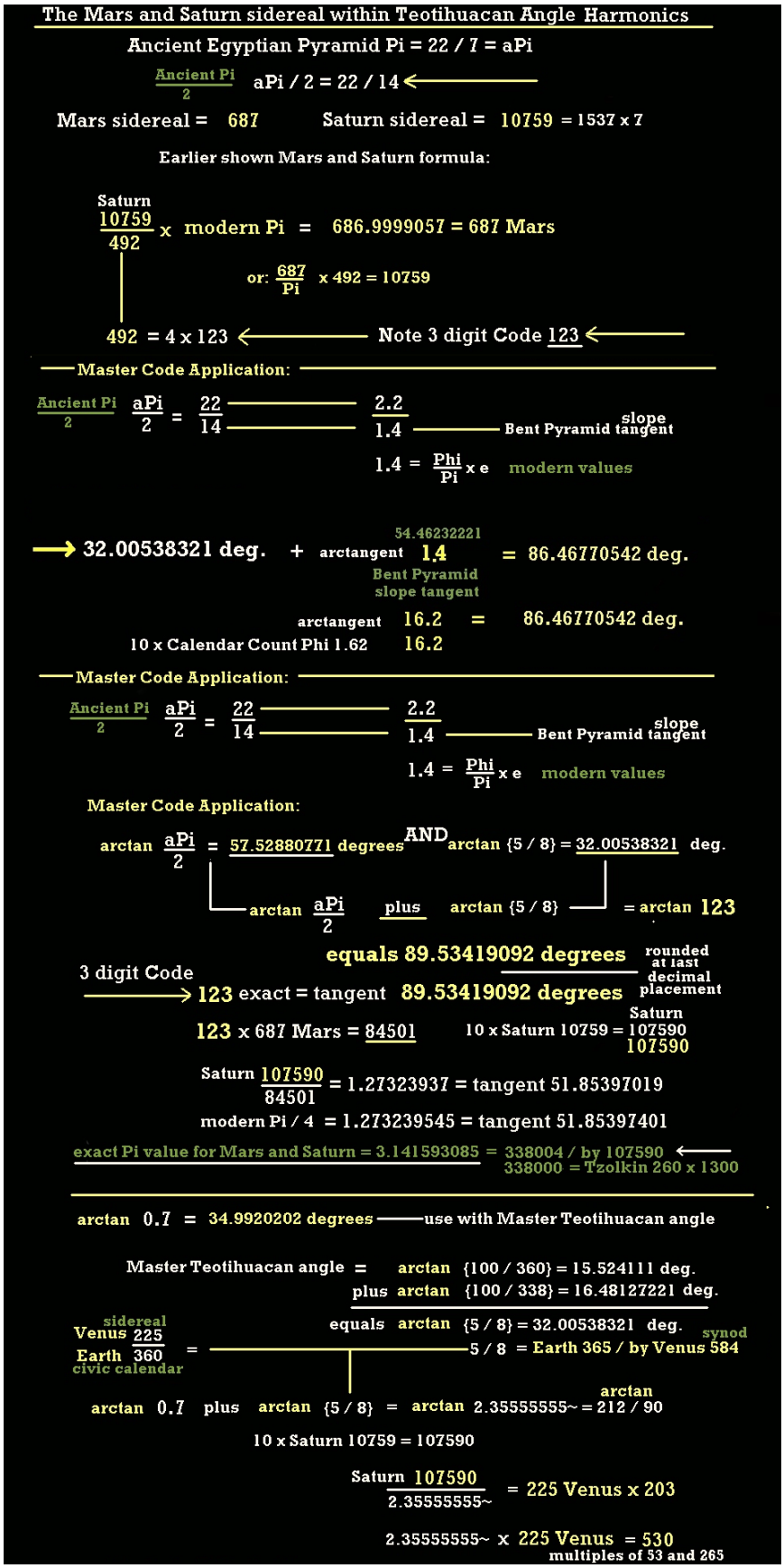
On the next page the "cosmological crossover" that I spoke of just previously
is represented by the usage of Ancient Egyptian Pyramid Pi divide by two.
Thus that fraction would be: {**22 / 14**} = {**aPi / 2**}.
Using this **Ancient Pi / 2** fraction as an arctangent, it is added to the Teotihuacan
Master angle of arctangent {**5 / 8**} = arctangent {**365 Earth / by 584 Venus**}.

The resultant arctangent is an amazing EXACT **123.**
This value is directly related to the Mars and Saturn sidereal.

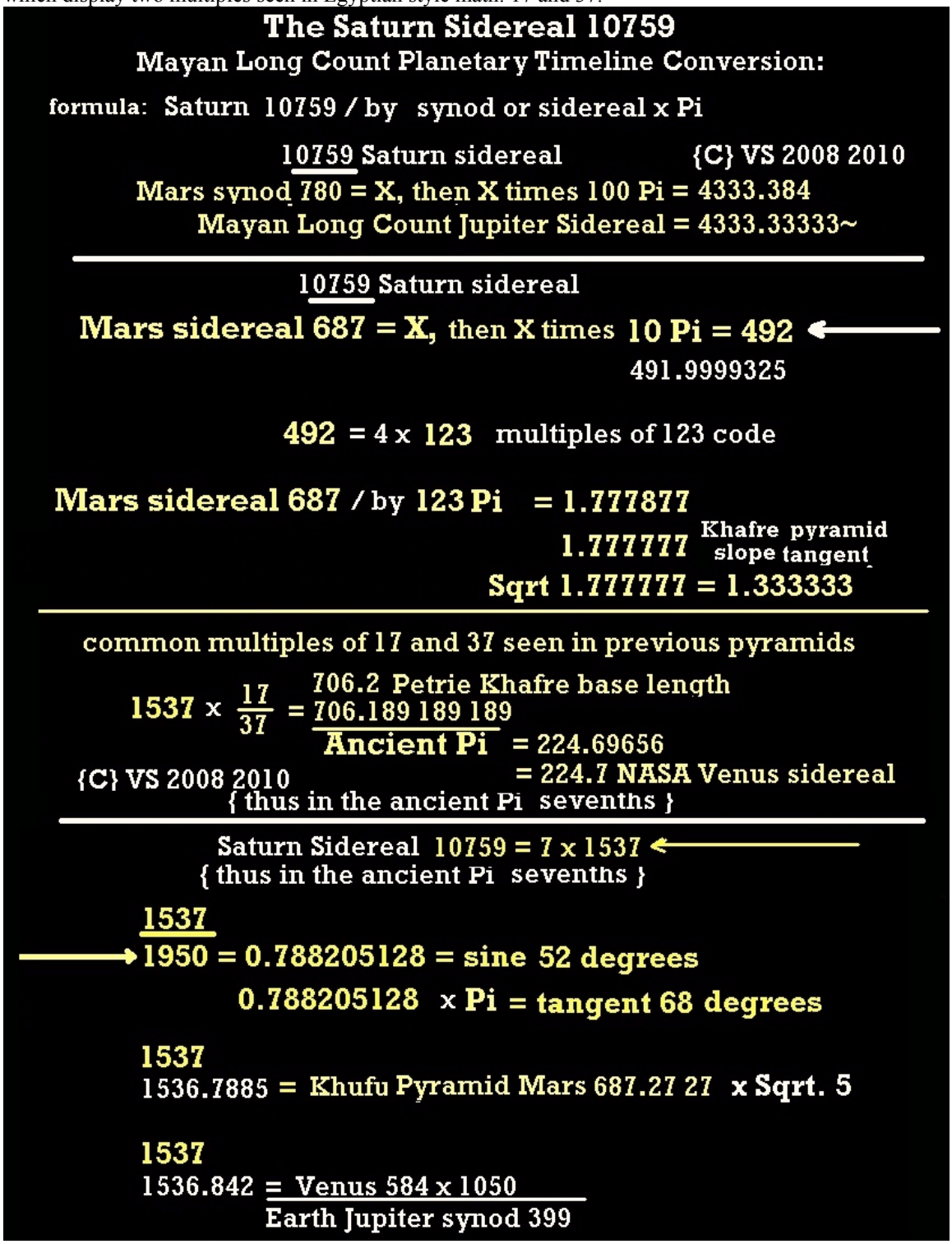
Follow the math in the table next page.
The resultant Pi value is in fractional form!
The differential in angle to modern Pi is shown as well.

Note that the resultant Pi value uses the Saturn sidereal 10759.

338004 / by 107590 = 3.141593085 with arctangent 1.27323937, cubit 20.62647779
338000 = Tzolkin 260 x 1300


The Mars and Saturn sidereal within Teotihuacan Angle Harmonics
Ancient Egyptian Pyramid Pi = 22 / 7 = aPi
Ancient Pi / 2
aPi / 2 = 22 / 14
Mars sidereal = 687
Saturn sidereal = 10759 = 1537 x 7
Earlier shown Mars and Saturn formula:
Saturn 10759 / 492 x modern Pi = 686.9999057 = 687 Mars
or: 687 / Pi x 492 = 10759
492 = 4 x 123
Note 3 digit Code 123
Master Code Application:
Ancient Pi / 2
aPi / 2 = 22 / 14 = 2.2 / 1.4
slope
Bent Pyramid tangent
1.4 = Phi / Pi x e
modern values
32.00538321 deg. + arctangent 54.46232221 14
Bent Pyramid slope tangent
= 86.46770542 deg.
arctangent 16.2 = 86.46770542 deg.
10 x Calendar Count Phi 1.62
16.2
Master Code Application:
Ancient Pi / 2
aPi / 2 = 22 / 14 = 2.2 / 1.4
slope
Bent Pyramid tangent
1.4 = Phi / Pi x e
modern values
Master Code Application:
arctan aPi / 2 = 57.52880771 degrees AND arctan {5 / 8} = 32.00538321 deg.
arctan aPi / 2 plus arctan {5 / 8} = arctan 123
equals 89.53419092 degrees
rounded at last decimal placement
3 digit Code
123 exact = tangent 89.53419092 degrees
123 x 687 Mars = 84501
10 x Saturn 10759 = 107590
Saturn 107590
Saturn 107590 / 84501 = 1.27323937 = tangent 51.85397019
modern Pi / 4 = 1.273239545 = tangent 51.85397401
exact Pi value for Mars and Saturn = 3.141593085 = 338004 / by 107590
338000 = Tzolkin 260 x 1300
arctan 0.7 = 34.9920202 degrees
use with Master Teotihuacan angle
Master Teotihuacan angle = arctan {100 / 360} = 15.524111 deg.
plus arctan {100 / 338} = 16.48127221 deg.
equals arctan {5 / 8} = 32.00538321 deg.
sidereal Venus 225 / Earth 360 civic calendar = 5 / 8 = Earth 365 / by Venus 584
synod
arctan 0.7 plus arctan {5 / 8} = arctan 2.35555555~ = 212 / 90
arctan
10 x Saturn 10759 = 107590
Saturn 107590 / 2.35555555~ = 225 Venus x 203
2.35555555~ x 225 Venus = 530
multiples of 53 and 265

Below are further Saturn sidereal calculations in what I call Convergence Dynamics. The last equations involve the fraction {17 / 37}, which display two multiples seen in Egyptian style math: 17 and 37.



Multiple 17 has been exampled earlier in the Masonic Codes and in the Sumerian Cylinder seal diagrams. Multiple 37 is from the Khufu pyramid Height of the average 481 feet = 13 x 37, and as a multiple of 13 this connects Egyptian style math and Mayan Long Count math.
37 is also the root or base value of the 9 multiples of 111, ie, 111 = 3 x 37, and 999 = 27 x 37.

Unique applications of the Teotihuacan Angle System

The two combined Teotihuacan angles:
Arctangent {**100 / 360**} and arctangent {**100 / 338**},
achieve the angle with arctangent {**5 / 8**} = arctangent{**Earth 365 / Venus 584**},
for **32.005383821** degrees.

This angle with it's cosmological implications has demonstrated unique capacity to produce multiple additional cosmological arctangents as displayed.

This process goes further into even more sophisticated applications.
The common fraction {**10 / 9**} = **1.11111111~.**
If you **square the fraction** {**10 / 9**} you get fraction {**100 / 81**} ←--- note.

{**100 / 81**} = {**200 / 162**}, where 162 = 3 x 6 x 9 = 100 x calendar Count Phi 1.62

{**100 / 81**} **= 1.23456790 123456790~**
= tangent of Petrie style **51** degree Menkaure pyramid

1600 / 162 200 / 162
9.87654320 987654320~ / by 8 = 1.23456790 123456790~

9.87654320 987654320~ = Ancient Pi x Harmonic Ancient Pi
22 / 7 5600 / 1782

Fraction {**10 / 9**} is extremely important in modern and ancient mathematics.

This fraction creates multiples:
{**20 / 9**} = 2.2222222~, {**30 / 9**} = 3.3333333~, {**40 / 9**} = 4.4444444~ and so on.

Venus in ancient calendar count has a sidereal of **225** days.

{**40 / 9**} = 4.4444444~ = {**1000 / by 225** Venus sidereal}

{**40 / 9**} / by Ancient Pi = {1.414 14 14 14~} = {**140 / 99**}
{**40 / 9**} / by Harmonic Ancient Pi = {1.414 285714~} = {**99 / 70**}

Ancient Square Root Two {**140 / 99**} x {**99 / 70**} = **2**

I have chosen the multiple to use as {**40 / 9**} = **4.4444444~** in the below equation, ON THE NEXT PAGE.
to premier the capacity of the Teotihuacan Master Angle, {arctan 5 / 8}.
Once again this will applied as an arctangent,
and that angle added to the Master Angle to see what tangent emerges.

Arctangent {5 / 8} = 32.00538321 degrees
Arctangent {40 / 9} = 77.31961651 degrees
109.3249997 degrees = arctan – 2.8515625 ←-----note.
resultant
arctangent
2.8515625 ----------→ 28515625 = 78125 x 365 Earth.
365 / 128
365 / 128 ---→ arctan 1.28 = 52 degrees
opposite arctangent = 0.78125 ←------!

arcsine 0.78125 = A degrees
{1 / tangent A deg.} SQUARED = 0.6384 ←------!
6384= 16 x 399 Jupiter synod

The next equation uses the multiple **6.666666~** = {**60 / 9**}. ←-----.
Note: 6.6666666~ squared = 44.4444444~ .

Arctangent {5 / 8} = 32.00538321 degrees PLUS
Arctangent {60 / 9} = 81.46923439 degrees
113.4746176 degrees = arctan - **2.302631579** ←-----note.

Resultant
Arctangent
2.302631579 = 100 Jupiter synods 39900
17328 ←-------note value.

17328 = 4 x 4332 Jupiter sidereal in days!

Yes, the other {10 / 9} = 1.111111~ multiples offer dramatic results as well.

The same style of cosmological results are achieved by using arctangents
for the fractions {**1 / 10, 2 / 10 , 3 / 10**….} and so forth,
in the same process of adding the angles together:

Arctangent {5 / 8} = 32.00538321 degrees PLUS
Arctangent {1 / 10} = 5.10593138 degrees
37.71597635 degrees = arctan **0.77333333~** ←----note.
Resultant
Arctangent
0.77333333~ = 150 / by Mercury synod 116 days !

0.77333333~ = hypercube nets 261 / by 337.5 ---→ 360 / 337.5 = 16 / 15
3375 = 27 x 125 = 25 x 135 = 5.4 x 625

Using {**2 / 10**}, the result is exact Egyptian tangent for upper half Bent Pyramid.
The resultant tangent = {**66 / 70**} = tangent 43.31531568.
Using {**4 / 10**}**,** the resultant arctangent **= 1.36666666~**
360 x 1.36666666~ = 492 ←----Note value.
{**492 / by Pi**} **x 687 Mars = 10759 Saturn sidereal** {**Pi value 338004 / 107590**}

Using {**8 / 10**}**,** the resultant arctangent is: **2.85 ---- or 285**

2.85 x 260 Tzolkin = Solfeggio 741

Jupiter synod **399 / by 285 = 1.4 =** Bent Pyramid tangent = {**Phi x e / Pi**}.

Note: Solfeggio **741** is known as the "Devils Tone".

Now this process gets more important in scope because the fraction {**5 / 10**}
is part of very important replicating geometry angles.
This is geometry from the 1 by 2 by hypotenuse Sqrt. 5 triangle.

Arctangent {**5 / 10**} = 26.56505118 degrees,
The opposite angle is thus arctangent **2** = 63.43494882 degrees.

26.56505118 32.00538321 58.57043438
Arctan {**5 / 10**} plus arctan {**5 / 8**} = arctan {**162 / 99**}
162 = 10 x calendar Count Phi 1.62

Resultant
Arctangent 72 x 360
162 / 99 -------→ 25920 / by {**162 / 99**} = **15840 = 3 x 5280 mile = 5040 aPi**

40 x Solfeggio 396 = 15480 = 30 x Solfeggio 528

MLC 1872000 / by {**162 / 99**} = **1144000 = Pascal 364 x 1000 Ancient Pi {22 / 7} aPi**

Note: Pi value 3594 / 1144 ---→ 3594 = 162 + Pascal 3432 and 3432 = 12 x Pascal 286

Using arctangent 2 the resultant arctangent is minus 10.5,
and 10.5 = 10 Saturn synods 3780 / by 360 civic calendar count.

The **16.5** degree angle produced by the arctan {**100 / 338**},
allows the 15.5 degree angle from arctan{**100 / 360**},
to produce the master angle of arctan {**5 / 8**} = **32.00538321** degrees.
Standing alone, this **16.5** degree angle:
is mainly a harmonic in the sense of the rounded angle form with the important geometry Sqrt 2. tetrahedral and pentagonal Phi angles,
with the tetrahedral angles rounded as is done in modern publications.

Sine = Phi / 2
16.5 plus pentagonal phi angle **54** degrees = tetrahedral **70.5** {arctan Sqrt. 8}.
Remember that **70.5 is angle ADE** in the Mars Pentad Mounds,
And that it is also the premier electron spin angle.

16.5 plus tetrahedral **19.5 = 36 degrees** which has cosine **Phi / 2.**
Sine 19.47122063 = 0.3333333~

The true arctangent {100 / 338} = 16.48127221
does have a nice Convergence Dynamic however worth noting.
arctangent {100 / 338} plus 30 degrees = 46.48127221 degrees = A degrees.
{1 / cos A} squared = 2.108999 679 -----→ use convergent 2.109 as 2109 ←----note.
2109 = 37 x 57 = 19 x 111 therefore: 2109 / by 399 = {37 / 7}
If you use the pure arctangent 2.108999 679, your Jupiter synod value = 398.999939~.

The arctangent {100 / 360} = 15.524111 degrees
produces the same kind of massive harmonics that the Master Angle arctan{365 / 584} does.

I will present a few select equations from this genre of harmonic with this angle.

Teotihuacan arctangent {100 / 360} = 15.524111 degrees.

30 / 9
arctangent {**100 / 360**} + arctan **3.3333333**~ = arctan **48.75** ←-----note.

48.75 = {**195 / 4**}, ----→ {**195 / 4**} **x 780** Mars synod = 38025 = 195 squared.

1.2 = Universal Harmonic Pi / by modern Phi squared.
1.2 = 702 Mayan Dresden Codex Constant / by 585 Venus synod
MLC = Mayan Long Count 1872000 / by 585 Venus = 3200 cycles.
1.2 = 5200 / by Mayan Long Count Jupiter sidereal 4333.33333~ days

15.52411 50.19442891 65.7185399
arctangent {**100 / 360**} + arctangent **1.2** = arctangent 2.21666666~

resultant arctangent
arctangent 2.21666666~ = arctangent {**180 / 399** Jupiter synod}

arctangent 2.21666666~ x 25920 = 57456 = 144 x 399 Jupiter synod.
57456 = {Baktun / 1000} / Jupiter synod 399

Earlier mentioned were the important angles from the {1 by 2 by hypotenuse sqrt.5} triangle.
These two arctangents in this geometry are 0.5 and 2.

15.524111 63.43494882 78.95905982
Arctangent {**100 / 360**} + arctangent **2** = arctangent **5.125** ←----note value.

Resultant arctangent 5.125
Thus 5.125 is obviously tied to the Mayan Long Count and the Earth Year:

MLC 1872000 / by 5125 = 365.2682927 days = 17 minutes off exact Earth year

Use 180 ----→ 18 ---→ **1.8** decimal progression.
In ancient Egyptian cosmologic planetary numerology the value 1.8 is important.

With ancient Sqrt. 2:
140 / 99
1.8 / by 1.414 14 14 14~ = Khufu pyramid slope tangent {14 / 11}.
99 / 70
1.8 x 1.414 285714~ = 2 x {14 / 11}

Note the progression: 63 / 110 = 819 / 1430
1.8 / by Ancient Pi {22 / 7} = 0.57 27 27 27 27 27~ = {14 / 11} minus 0.7
THEN: {14 / 11} then / by 0.7 = 1.8 18 18 18 18 = 180 / 99
cont.: 1.8 18 18 18 18 = 180 / 99 x 1.2 x 1.2 = 2.618 18 18, then x 1.2 = 3.14 18 18 18~

So to show now, the result of applying the arctangent 1.8
with arctangent {100 / 360}:

15.524111 60.9453959 76.4695069
arctangent {**100 / 360**} + arctangent **1.8** = arctangent **4.1555555**~ ←----note.

Resultant arctangent 4.1555555 = arctangent {**187 / 45**}
187 = 11 x 17
use modern pi and phi and e = 2.71828 187 = 100 x Pi x Phi / by e

Resultant arctangent 4.1555555 = arctangent {**119 / by 28.36 36 36 36~}**
119 = 7 x 17
119 / by 187 = 2 / aPi
aPi = 22 / 7
28.36 36 36 36~ = 28080 / 990
28080 / by 260 Tzolkin = 108 = {15 / 9} Royal Cubits x aPi

An interesting experiment follows by using the Teotihuacan angle
arctangent {**100 / 360**} = **15.24111** degrees,
with a Tzolkin counterpart:
{**260 / 100**} = {195 / 75} = {13 / 5}.
Arctangent {**260 / 100**} = **68.96248897** degrees.

84.48659997
arctangent {**100 / 360**} + arctangent {**260 / 100**} = arctangent **10.36 ←-- note.**

Resultant arctangent
10.36 ----------→ 1036 = 28 x 37 = 777 x Khafre pyramid slope tangent **1.333333~**
Multiples of 37 are also multiples of 111 and 481.

Another experimental application used to determine complexity of this angle,
is to try and use what I call 360 day calendar count Phi = 1.62.

162 x 360 = 58320 = 900 Royal Cubits x Ancient Pi

360 / 162 = 2.2222222~ = 20 / 9
20 / 9 x 1.414 14 14 14~ = Harmonic Ancient Pi {5600 / 1782}
20 / 9 x 1.414 285714~ = Ancient Pi {22 / 7}

Above are the two Ancient Square Root Two values: {140 / 99} x {99 / 70}.
Angles:
arctan {**100 / 360**} = **15.524111** degrees.
arctan {**162 / 100**} = **58.31363231** degrees.

arctan {**100 / 360**} + arctan {**162 / 100**} = arctan **3416 / 990** ←--note numerator

The numerator from the arctangent is **3416 = 56 x 61**
61 / by Pi squared = 10 / Phi

The exact Pi value that works in the above table here is 3.141656781.

We see multiples of 17 quite often in ancient math.
There is also the ancient 17 pointed arch seen in Sumerian cylinder seals,
and the 17 pyramid arch seen in the Masonic Lodge Architecture Codes.
This is a fascinating result:
Angles:
arctangent {**100 / 360**} = **15.524111** degrees
arctangent {**17 / 10**} = **59.53445508** degrees

44.01034408

arctan {**17 / 10**} **minus** arctan {**100 / 360**} = arctan **0.966037736** ←-----note.

Resultant arctangent
0.966037736 ----------→ use inverse arctangent or {1 / X} = **1.03515625** ←---
Resultant inverse arctangent
1.03515625 ----------→103515625 = 625 squared x 265

406 x 265 = 10 Saturn sidereal or 107590 days

Teotihuacan Mathematics Reveal Dual Cubit System

Which Pi value did the ancient cultures use?

Much of the modern debate centers on the usage of modern computer calculated Pi in the Khufu pyramid, and as such in any ancient culture, ranging from the Sumerians to the Stonehenge cultures, to the Olmec, and on through Meso American cultures from the Mayans to the Teotihuacan metropolitan culture**.**

Anybody who thinks that the Egyptians used modern Pi is mistaken, and merely swept up by modern misinterpretations, and aggrandizations of the modern Pi value, then that modern Pi value is cast like false pearls onto the internet or books, attributing this to ancient cultures.
There is no way the Egyptians calculated modern Pi or the exact square roots, all of which have infinite random decimals.

Egyptians did not need modern Pi, they had functional fractions that sufficed just as well and these are {**355 / 113**} **primarily,**
and from there fractional Pi values such as: 3.14166666~ , 3.1416,
or the Pi value shown here using the Saturn sidereal {**338004 / 107590**}**.**
Excellent research by Lang has shown the possibility of a Pi value in ancient number progressions as well at {**84823 / 27000**}.
This Pi value just exceeds {**355 / 113**}.
A good question to ask then is this:
With these multi faceted fractional Pi values available, how would any culture's mathematicians even have a clue as to why modern Pi would be the right choice?
Then of course there are the hokum attributions of aliens giving the ancient cultures the great Pi and Phi values, and the exact square roots all with infinite decimals, which the humans could not apply in their mathematics anyways.

This is grandly amusing to calculate modern Pi with a quill, ink and papyrus.
If aliens did enhance the cultural mathematics of ancient cultures, these sophisticated aliens would have offered the fractional Pi values that these cultures could have tangibly used not only in everyday purposes,
but also for sophisticated measurements.
Aliens aside, Hue-man had his own capacity to perform fractions
and decimal calculations that could be tangibly applied.
Therein the ancient square root two fractions remain optimum and quite efficient to operate as has been shown.
These ancient "square root two" values can then be expanded to any multiple as a fraction:
2. 828 28 28 28~ = 280 / 99 times 2.828 285714 285714~ = 99 / 35,
and thus there would be ancient square root 8.

To compound the issue,
The Royal Cubit is globally accepted to lie within the framework of the Petrie conclusions especially from within the King's Chamber,
and that is limited to a cubit value of: **20.615 to 20.625** inches.
ALL the volume Pi values do not exist within this cubit spread.
Ancient Pi as 22 / 7 and cubit 20.625 value Pi 3.14 18 18 18~
and Harmonic Ancient Pi {5600 / 1782} are not Pi volume values.
These are cosmological numerologies attached to planetary movement and calendar accounting systems. These were far more important to the ancient cultures than the Pi values associated with volumes.
These "planetary pyramid Pi" values represented the known heavens with the first six planets existing in a definable sacred geometry.

The point I am making here is that regardless of the upcoming method to produce a cubit system that becomes inclusive of the "volume Pi" values, into the Petrie cubit spread for the royal cubit, none of these Pi values have anything to do with the Royal Cubit. The Royal Cubit is {1134 / 55}.
If I had to ascribe 4 values of Pi to the Khufu pyramid which would create the corresponding slopes that produce the uneven base lengths measured by both Petrie and Cole {and others} these would be:
{22 / 7}, {5600 / 1782}, {1728 / 550}, and {355 / 113}.

The system shown here basically creates a dual Royal Cubit
from the Pi values: Ancient Pi {22 / 7} and 3.14 18 18 18~ = {1728 / 550}.
These cubits are: 20.618 18 18~ and 20.625 respectively.

687.27 27 27~ x {22 / 7} = 2160 = 687.5 x {1728 / 550}

In the "dual Royal Cubit" or "dual cubit" system,
The cubit values are somewhat flipped,
with Pi value {22 / 7} attached to cubit 20.625,
and Pi {1728 / 550} attached to cubit {1134 / 55} = 20.618 18 18~.

Equation:
Planetary time lines: Saturn synod 378, Civic Calendar 360,
Earth year count 365 and Venus synod 584.
NOTE: the fraction 365 / 584 = {5 / 8} = {0.625} = arctangent 32.00538321

3780 times 365 then x Pi value = cubit.
360 584

aPi
3780 times **365** then x {22 / 7} = **20.625**
360 584

3.14 18 18 18~
3780 times 365 then x {1728 / 550} = **20.618 18 18~**
360 584

Harmonic aPi
3780 times 365 then x {5600 / 1782} = **20.62289562**

Thus ALL the volume Pi values such as {355 / 113} or {1131 / 360},
or modern Pi, or the fine cosmological value with the Saturn synod:
{338004 / 107590} will recalculate in the 20.616+ range.

I will use my Saturn sidereal value as an example:

Saturn Pi
3780 times 365 then x {338004 / 107590} = **20.61670462**
360 584

Here are the corresponding dual cubits:
Modern Pi = 20.616707179 3.14166666~ = 20.6171875
{355 / 113} = 20.61670354 3.1416 = 20.61675

Note: if you reverse the Earth Venus fraction in the equation,
and increase the Saturn sidereal by a factor of 100,
and use Ancient Pyramid Pi {22 / 7} the result is 528 or 5280←---!

378000 times 584 then x {22 / 7} = 5280 mile
360 365

That above equation alone should leave no question
that Ancient Pyramid Pi {**22 / 7**} is attached to Royal Cubit **20.618 18 18~,**
due to the role reversal in the equation of the Earth 365 and Venus 584.

This "dual cubit system" can also **construed** from a Khufu pyramid height earlier
displayed in pdf One of this two part series as 481.1154539 feet.
That process is with held for my next pdf:
Advanced Convergence Dynamics in Universal Harmonic Codes.

This "dual cubit system" can also be found within the framework of the processes
that have been displayed here with the Master Teotihuacan angle arctan{**5 / 8**}.

One rough Pi value in modern attributions is **3.125** for **B**abylonian Pi.
The Babylonians had better Pi values to be sure, and they have all been displayed, but none the less, this value **3.125** is a 20.625 cubit attribute:
6.6 x **3.125** = 20.625. This value **3.125** = {25 / 8}.

The easiest way to show this is:
Use the reverse value of **3.125** in the arctangent system:
{**1 / by 3.125**} = {**32 / 100**}.
These as arctangents add to 90 degrees.
Note as well that both {**3.125**} and {**32 / 100**} ←------ as square root arctangents, are clearly displayed within the Mars Pentad tetrahedral grid.
Basically to use **3.125** as an arctangent you subtract the Master Teotihuacan angle to obtain the same result as {1 / by tangent X}.
First I need to show the Khufu Pyramid Lunar Month and metric conversion factors which work within the framework of the Khufu base length 756,
and the hypercube polytope system based on 16,
by using the arc two tangents that will be used again to produce "dual cubits".

arctangent {**100 / 360**} = 15.524111 degrees
arctangent {**32 / 100**} = 17.74467163 degrees
49.75005483
arctangent {**100 / 360**} + arctangent {**32 / 100**} = arctangent **1.18125** ←---note.

Resultant arctangent
1.18125 ----------→ 118125 ----→ 118125 / by 225 Venus = 525

118125 / by 360 = 328.125 --------→ 3.28125
3.28125 is Khufu pyramid metric conversion factor
3.28125 x 230.4 = 756 Khufu base
2304 is a hypercube polytope value

118125 / by 4000 = 29.53125-----→ Khufu Pyramid Lunar Month in days.
29.53125 x 256 {16 squared} = **756** Khufu pyramid base length

take the two values together: **29.53125 / by 3.28125 = exactly 9**
hypercube 16:
16 x 3.28125 = 52.5 --------→ ten x seked 5.25 for Khafre pyramid
16 x 29.53125 = 47.25------→ = 687.27 27 27~ x 687.5 = 472500.
This will be defined further in the next pdf.

arctangent {**100 / 360**} = 15.524111 degrees
arctangent {**32 / 100**} = 17.74467163 degrees
49.75005483
arctangent {**100 / 360**} + arctangent {**32 / 100**} = arctangent **1.18125** ←---note.
Resultant arctangent
1.18125 ----------→ 118125 ----→ 118125 / by 225 Venus = 525

Note value 1.18125 ----------→ 118125 continued next page.

1.18125 ----------→ 118125 --------→ **1181.25** ←---- align decimal properly

1181.25 / by Mars 687.27 27 27 = 1.71875, then x 12 = cubit 20.625

1181.25 / by 687.5 = 1.718 18 18~, then x 12 = cubit 20.618 18 18~.

Therefore:
You can go to my cubit calculation graphs
and select each corresponding **"Mars sidereal" value**
attached to the corresponding volume Pi values,
such as modern Pi with 687.5493542 as "Mars sidereal",
and insert that into this equation and you will obtain the EXACT
same Pi cubits earlier displayed that fall into the **20.616+ range:**
1181.25 / by modern Pi "Mars sidereal" 687.5493542 equal:
1.718058482, then x 12 = 20.616707179.

Thus the Royal Cubit has a primary value of {**1134 / 55**} = **20.618 18 18~**
and a "dual Royal Cubit" value of: **20.618 18 18~ and 20.625,**
if you want to accept this complex equation process as valid in ancient math.

Another fine equation with Venus 584, Saturn 378 and Earth 365 to note:

Venus 584 x 378 x Ancient Pyramid Pi {**22 / 7**} equals **19272 ←--note value**
360 / 10

19272 x Mars 687.27 27 27~ = 13245120 ←--note next line.

13245120 = 584 Venus synod x 22680 = 35040 x 378 Saturn synod
13245120 = 360 civic calendar **x 36792 = 588672 x 225 Venus sidereal**
13245120 = Khufu pyramid Mars Jupiter synod 816.48 x {**146000 / 9**}.

Other interesting equations:

The Mayan Long Count 1872000 / by Dresden Codex 702 = 2666.66666~
Align 2666.6666~ in proper decimal placement:
2.6666666~ = 24 / 9

Venus 584 / by 2.66666~ = 219 = {**6 / 10**} **x Earth 365** or 365 / by 1.66666~.

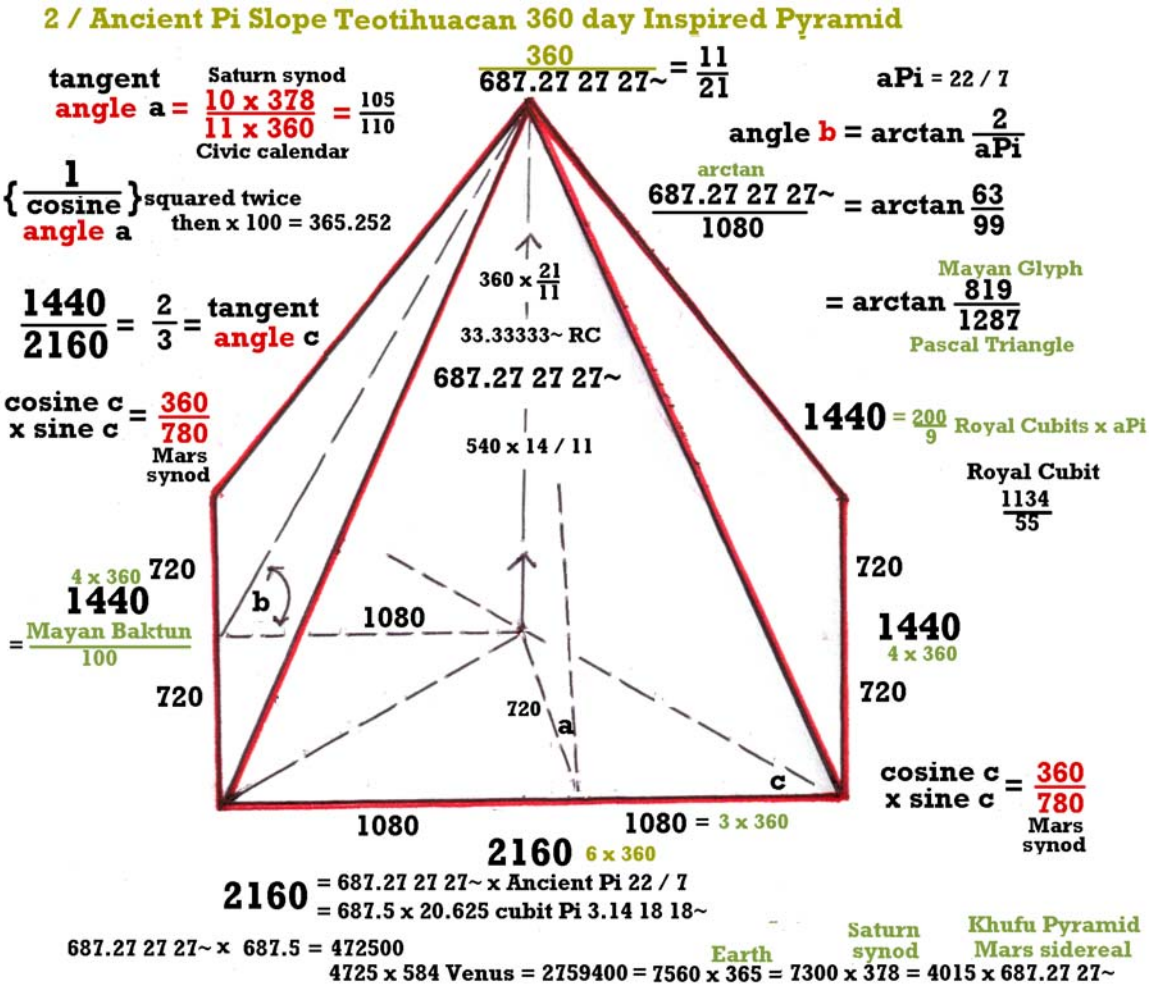
This next equation will offer the groundwork for the pyramid on the next page:

This rectangular pyramid has primary slope: 2 / by Ancient Pyramid Pi {**2 / aPi**}.

{36500 / 125} x Khufu slope tangent {14 / 11} equals: **2 / aPi**
584 Venus synod

{36500 / 125} x Khufu slope tangent {14 / 11} equals: **2 / aPi**
584 Venus synod

Rectangular Pyramid with two slopes:
arctan {**2 / aPi**} = 32.47119229 degrees
arctan {**105 / 110**} = arctan {**21 / 22**} = 43.6778015 degrees



All values within this pyramid primary length constructs are expressed as multiples of the 360 day civic calendar. This is intended to also show a direct relationship to the Teotihuacan angle tangents {100 / 360} and {360 / 100}, though that angle is not displayed here. The Mars sidereal set at 687.27 27 27~ obviously is from the formula for Khufu pyramid standard base length of **756** feet.
7560 = 21 x 360 = 20 x 378 Saturn = 11 x 687.27 27~ Mars = 33.6 x Venus 225
7560 x 108 = 816480 = 1000 Mars - Jupiter synods in Khufu pyramid 756 base.
NASA value for the Mars Jupiter synod is 816.5 days.
In the Mars Pentad tetrahedral grid, this value is Sqrt. {2 / 3} x 1000.

Universal Harmonic Pi and modern Phi squared reveal The Earth Year in Teotihuacan Master Code

Universal Harmonic Pi was first found by me a few years ago while looking at the Mayan Dresden Codex astronomical constant 702, and the Mayan Long Count Venus synod set at 585 days.

1872000 / by 585 Venus synod= **3200** cycles.

702 Dresden Codex **/ by 585** Venus synod = {**6 / 5**} = **1.2** ←------

{6 / 5} = 1.2 = Pi / by modern Phi squared--→ exact at 1.19998~

thus uPi replaces Pi to make the equation work perfectly:

modern Phi squared x **1.2 = uPi = 3.141640787**

12 = 10uPi / by Phi squared
12 x 12000 = Mayan Baktun

Thus modern mathemtics is simplified and Pi and Phi are unified under a fraction of {**6 / 5**}.
This method goes into Sqrt. 5 pentagonal Phi geometry.

Inverse 1.2 = 0.83333333~ = {5 / 6} = Phi sq. / by uPi

Arctangent **Sqrt. 5 = 65.90515745** degrees

Sine **65.90515745** degrees = Sqrt. 0.83333333~ = Sqrt. {5 / 6}

Or one can use the angle system I have developed, and display a spectacular Convergence Dynamic.

Arctangent 1.2 = 50.19442891 degrees = A degrees
Decimal variate to better show the math
{1 / cosine A} then SQUARED = **2.44 ----------→ 244**

244 = 4 x 61 ------→ 61 / by {uPi squared} = 10 inverse Phi = 6.180402817
61 / by Pi squared = 10 inverse Phi

To quickly conclude:

uPi / by Phi squared = 1.2 ----→ use as an arctangent = **50.19442891** degrees.

Teotihuacan arctangent {5 / 8} = 32.00538321 degrees

1.2 = 6 / 5
arctangent 6 / 5 PLUS arctangent 5 / 8 = 82.19981212 degrees

82.19981212 deg. has exact tangent of: 7.3 ←------ base value of 365 = 5 x 73.
7.3 x 50 = 365 Earth year count

An anomalous set of possibilities occurs with our predominant Teotihuacan angles and their corresponding arctangents,
and the molecular angle of water.
Though the technical molecular angle is tetrahedral based **109.5** degrees,
but we know from science that the true angle is altered by electron activity
to an angle of 104.5 degrees.

104.5 minus Teotihuacan 16.5 = 88 degrees.

Thus to align to fractional applications:

2835 / 99
Arctangent 28.63 63 63 63 63~ = 88.0000077 degrees.

88.0000077 degrees plus 16.48127221 degrees = 104.4812799 degrees.

arctan {360 / 100} plus 30 degrees = 104.475889 degrees.

arctan {338 / 100} plus arctan 0.6 = 104.4824843 degrees.

From an interesting technical standpoint of purist modern angle geometries:

Arc cosine negative 0.25 = 104.4775122 degrees ←---- note value.

Tangent 104.4775122 degrees = exactly Sqrt. 15.

Am I saying that the Teotihuacan mathematicians knew the molecular angle of water? Absolutely not. What is apparent though is that the master angle **32.00538321 degrees** derived from the arctangent {**Earth 365 / by Venus 584**}, simply aligns into important mathematical harmonics which are inclusive of such geometries. **Look at the result offered by:**

The third equation uses Bent Pyramid tangent **1.4** = **54.46232221 degrees**:
32.00538321 plus 54.46232221 degrees = 86.46770542 degrees:
86.46770542 degrees = arctangent 16.2 ←----!

Here we have the result being 10 x Calendar Count Phi 1.62 = 16.2 ←---note.
and everything can be expressed as fractions.
Now observe a modern mathematic convergence to the exact same value.
From this equation the new equation is developed using the **9**:
Sqrt. 1.62 / by 9 = modern square root two / by 10.
New equations of exact convergence:

Sqrt.5 geometry is PHI modern geometry:
Arctangent Sqrt.5 = 65.90515745 degrees.
Sine of 65.90515745 degrees = Sqrt. 0.8333333~
and the value **of 0.833333~ = uPi / by Phi squared!**
So:
9 / by Sqrt.5 = 4.02492236 = exactly the sqrt. of 16.2 ←----see note above.

Thus we return to the earlier table:

{**1 / by sine 32.00538321** degrees} **squared = 3.56**

3.56 ----→ 356 = 4 x 89

89 is the root value of 356.

Now use both values achieved from sine and cosine:

89 / by 0.61805555~ = 144 = Mayan Baktun / 1000.

144 = 12 x {10 uPi / by Phi squared}

inverse 144 = Sqrt. {0.0833333~}

Sqrt.{**0.0833333~**} is the shortest length is the Mars Pentad Mounds

Note the last line:

Sqrt.{**0.0833333~**} is the shortest length is the Mars Pentad Mounds

In essence the fraction **89 / 144 = 0.618055555~**

The value **144** is the Mayan Baktun **144,000 / by 1000.**

The inverse of 144 = Sqrt. 0.08333333~ ←-----note value.

Sqrt.{**0.0833333~**} is the shortest length is the Mars Pentad Mounds

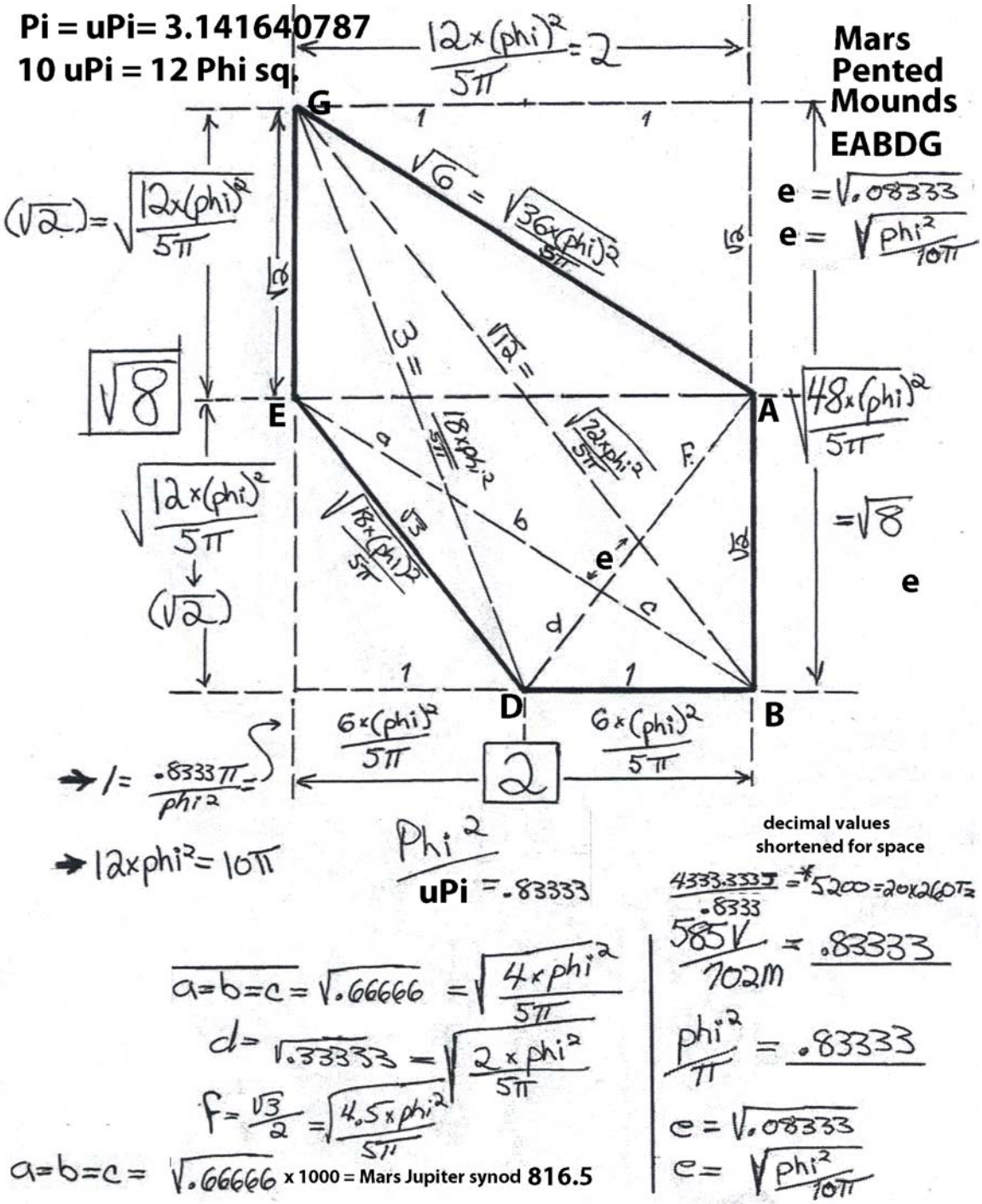
So the next few pages are a review of the mathematics just exampled,
for the purpose of displaying the Mars Pentad mounds tetrahedral geometries
and how that important set of mounds on Mars at Cydonia
integrate into these mathematics.

First displayed is the Mars Pentad itself defined in Universal Harmonic Pi.

Then a cross sectional analysis of the Pentad is offered.

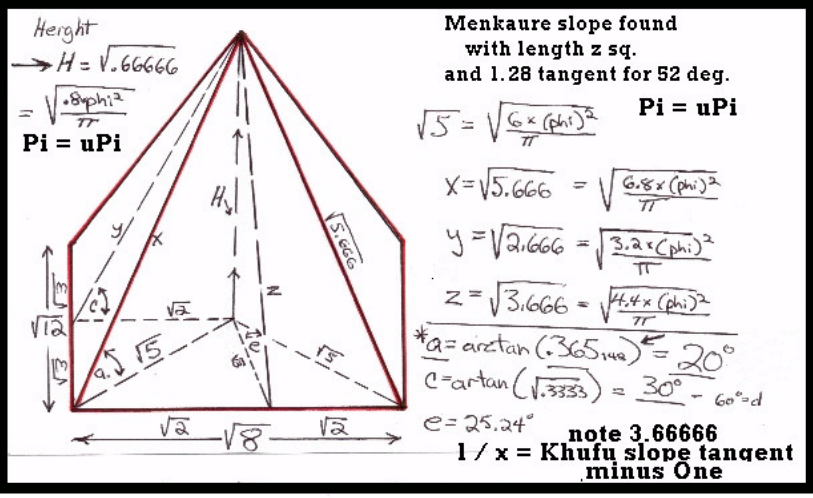
From there a Menkaure Pyramid geometry is detailed using the aforementioned progression that utilizes the Ancient Egyptian Phi squared value of 2.618 18 18 18~ = 144 / by 55.
This Menkaure pyramid uses both ancient Pi values of:
Ancient Pi = 22 / 7
20.625 cubit Pi = 3.14 18 18 18~ = 1728 / by 550.

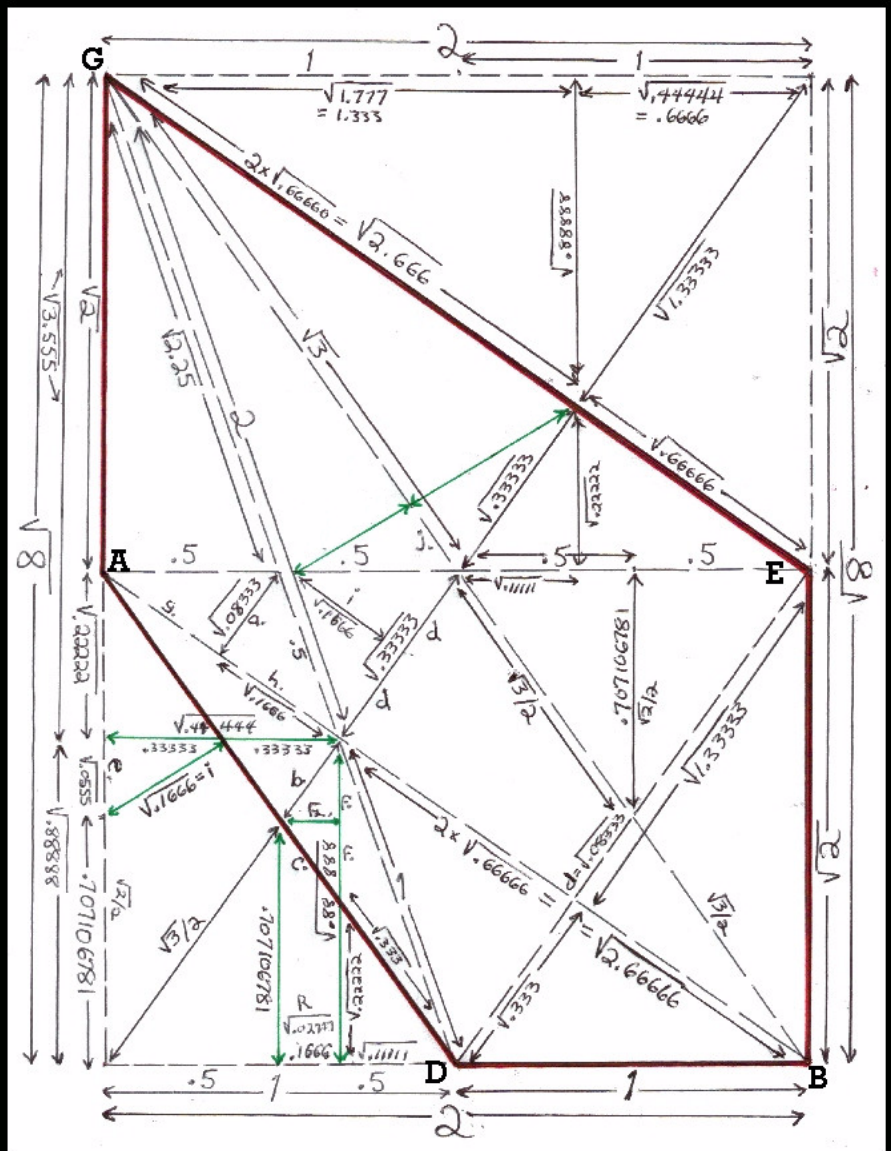
The Mars Pentad Mounds tetrahedral grid in uPi and Phi:
Length e = sqrt. 0.0833333~ the shortest length in the Mars Pentad.



This above was from the first pdf on the Mars Pentad Mounds released in 2008 and so with the image next page:
Mounds AEBDG at Cydonia on Mars.

Sqrt 0.666666 x 1000 = Mars Jupiter synod





Mars Pentad AEBDG Mounds Cydonia

A quick recap brings us to a Menkaure pyramid constructed from the mathematics shown in the last paragraph of this page.

arctangent {100 / 360} = **15.524111** degrees.
arctangent {100 / 338} = **16.48127221** degrees.
These angles are added to become: **32.00538321** degrees.

Next the fraction 89 / 144 is reviewed in the next three tables:

{1 / cosine **32.00538321**} **squared** = **1.390625**

1.390625 ----------→ 1390625 = 15625 x 89 ←-- root value.

0.6180555555~ = 89 / 144 ←---
144 = 12 squared and 12 = 10uPi / by Phi squared.

16 / 10 = 1.6 = inverse {0.625}
Arctangent 1.6 = 57.99461679 degrees

57.99461679 degrees + **32.00538321** degrees = **90**

sine 57.99461679 degrees = X
{1 / X} squared = 1.390625
divided by 225 Venus sidereal
!------→ = 0.006180555555~ ←----!

{**1 / by sine 32.00538321** degrees} squared **= 3.56**
3.56 ----→ 356 = 4 x 89
89 is the root value of 356.
Now use both values achieved from sine and cosine:
89 / by 0.61805555~ = 144 = Mayan Baktun / 1000.
144 = 12 x {10 uPi / by Phi squared}
inverse 144 = Sqrt. {0.0833333~}

Sqrt.{**0.0833333~**} is the shortest length is the Mars Pentad Mounds

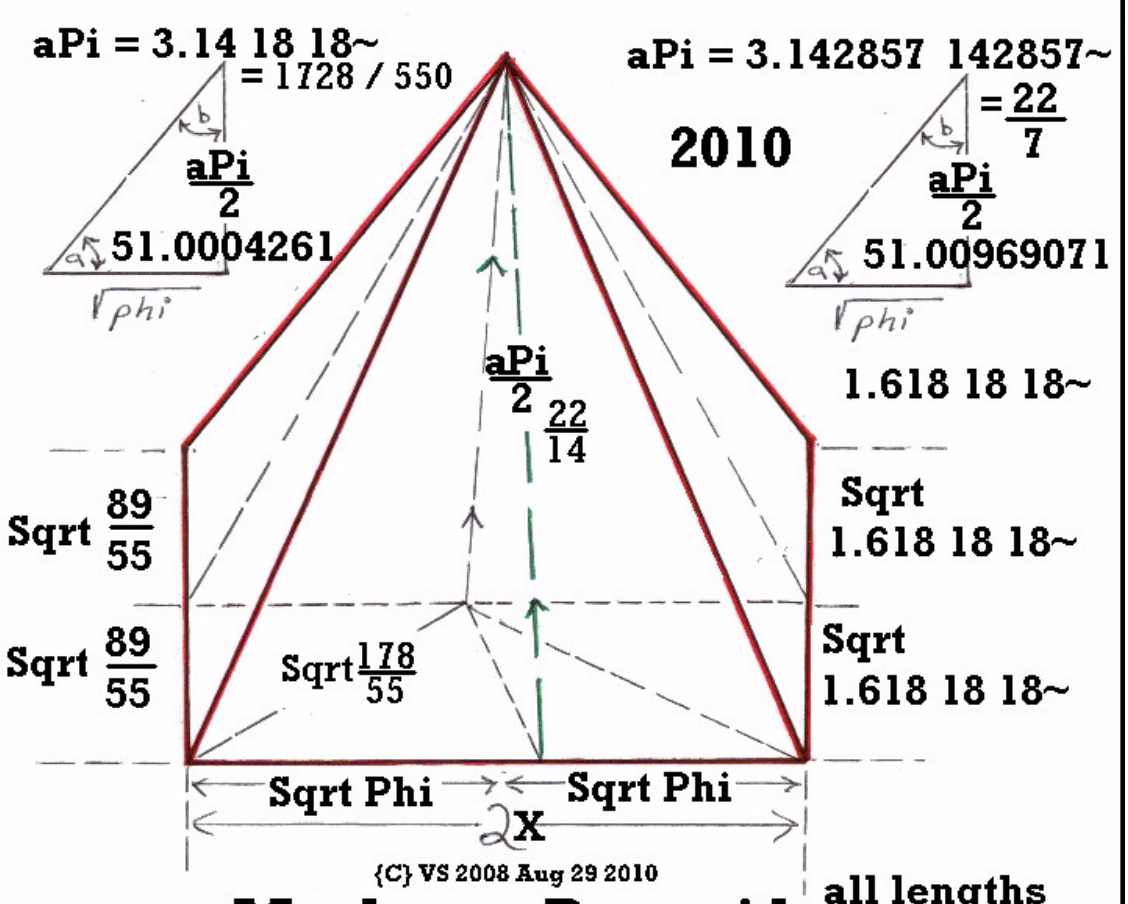
The two Ancient Egyptian Phi style progressions are reviewed,
And remember that these can all be expressed by fractions.

0.6180555555~ + 1 = 1.6180555555~ + 1 = 2.61805555~
0.618 18 18 18~ +1 = 1.618 18 18 18~ +1 = 2.618 18 18 18~

1.618 18 18 18~ / by 0.618055555~ = 2.618 18 18 18~

see next page for these values in Petrie 51 degree style Menkaure Pyramid

--→ aPi, in the pyramid diagram are the two Ancient Pyramid Pi values, with cubits 20.618 18 18 18~ with {22 / 7}, and 20.625 with 3.14 18 18 ~.



2.618 18 18 - 1 = 1.618 18 18
144 / 55

1.618 18 18 - 1 = 0.618 18 18
89 / 55 — 34 / 55

Conversion factor with alternate "inverse Phi"

0.61805555 x 2.618 18 18~ = 1.618 18 18~

Theoretic Square Base Pyramid 51 degrees

0.61805555 +1 = 1.618055555
89 / 144

1.618055555 +1 = 2.618055555
233 / 144 — 377 / 144

2.618055555 x 1.2 = 3.14166666 = 1131 / 360

1.618 18 18 x 1.618055555 = 2.6183 08 08 08

2 x solfeggio 396 = 792 ——— 20737 / 792

Associated Math to the Teotihuacan Angles

arctangents {360 / 100} and {100 / 360} = **15.524111** degrees.
arctangents {338 / 100} and {100 / 338} = **16.48127221** degrees.
These angles are added to become: **32.00538321** degrees.

arctangent {0.625} = **32.00538321** degrees

{**0.625**} squared = **0.390625**

0.390625 = **1.390625 minus 1** = {1 / cosine **32.00538321**}squared, minus **1**

0.390625 ←-----→ 390625

390625 / by Venus sidereal 225 = 1736.11111~

1.73611111~ = {625 / 360}←------→ 1736.11111~
1.7361111~ x 1.728 = 3
17280 = 0.66666~ x 25920

MLC Jupiter sidereal
4333.33333~ / by 1.7361111~ = 2496
24960 = 32 x 780 Mars synod

57.99461679 degrees + **32.00538321** degrees = **90**

cosine 57.99461679 degrees = 0.52999894 --→ 0.53

53 x 13 = 689 and 689 is the Mayan Long Count Mars sidereal:

MLC 1872000 / by 689 Mars= the Baktun 144,000 / by 53.

53 x 5 = 265 **off by 0.5 mps of speed of light**
265 x 265 x {2650 / 999} = 186282.5325

Egyptian number 1296 x 0.53 = 686.88 converges to 687 Mars

686.88 / by 25920 = {0.0265}

Mars 687 --→ 0.687 --→ arcsine 0.687 = A degrees
Cosine A = tangent 36 36.0043

The exact value for Mars in this equation if reversed and applied
from 36 degrees exact, is 687.121499-----→ use 0.687121499.

The Teotihuacan Master Code

has other unique attributes and operations which have absolutely dramatic convergence with universal constants and ancient Sumerian cylinder seal mathematics with the 16 pointed star, the 7 dots, and the 17 pointed arch which are also seen in the Philadelphia Grand Masonic Lodge architecture.

arctangent {**100 / 360**} = **15.524111** degrees
arctangent {**360 / 100**} = **74.475889** degrees ←------- use this.

arctangents {100 / 360} = **15.524111** degrees.
arctangents {100 / 338} = **16.48127221** degrees.

These angles are added to become: **32.00538321** degrees ←------

Arctangent {625 / 1000} = arctan {0.625} = **32.00538321** degrees

Arctan {**360 / 100**} minus arctan {**0.625**} equals:
74.475889 degrees
minus 32.00538321 degrees
equals:

42.47050579 degrees = arctangent **119 = 7 x 17**
130 = 260 Tzolkin / by 2

Take note of the **119 = 7 x 17** in the above table,
and the Sumerian Cylinder seal with the 7 dots as the Seven Sisters,
as seen from Earth, and the 17 pointed arch on the next page.

Now look at {**Ancient Pi / 2**} = {**11 / 7**} ←-----

11 x 17 = 187
7 x 17 = 119 **187 = 100 x Pi x {Phi / e}, e = 2.71828**

119 x 687 Mars = 140 x 583.95 --→ 584 Venus synod
140 x Royal Cubit x Ancient Pi = 9072 ←---note.

9072 is the number of inches in the Khufu Pyramid base **756** feet.
Megalithic yard in inches: **2.72 x 12 = 32.64 inches.**
9072 / by megalithic yard in inches = {**4725 / 17**}
9072 / by megalithic yard in inches = Mars 687 .27 27~ x Mars 687.5
1700
Those Mars values are attached to Ancient Pi and 20.625 cubit Pi {1728 / 550}.

16 pointed star x **17** pointed arch = **272 = 100 x megalithic yard**

7 x 17 = 119
16 x 17 = 272 ---→ megalithic yard **2.72 feet x 100**

{**119 / 272**} = **0.4375 ----→ 43.75 x tangent 54 x Planck**
equals
399.0000087 Jupiter synod!

{**272 / 119**} = {**16 / 7**} = {**912 / 399** Jupiter synod}

912 = 100 x tangent 54 x Planck

Usage of Planck = using the fractional coefficient to the full value = **6.626068**

Using Pi value 3.1416 ←----- = {**15708 / 5000**} below table:

200,000 x Pi 3.1416	**119**
119	**687** equals **Sqrt 3 / 10,** exact at 687.0468
equals	
5280 mile	
31416 = 168 x 187	1190 / by 187 = 2 / by Ancient Pi
168 = 5280 / by 10 Ancient Pi	187 = 100 x Pi x {Phi / e}

Pi value 3.1416 is quite interesting. It has a pyramid slope of 51.85390893 deg.
Note on the next page with value **714** emerging from Teotihuacan mathematics.
714 / by 314.16 = 2.27 27 27 27~ = Khufu pyramid slope tangent plus One.
714 / by 3.1416 – 227.27 27 27~ = 100 x **Khufu pyramid slope tangent plus 100.**

The cosmologic value **714** emerges from the mathematics as well.
Some groups consider **714** to be a secondary Solfeggio value
as part of an 18 frequency Solfeggio scale.

Arctan {**360 / 100**} minus arctan {**0.625**} = **74.475889 - 32.00538321**
74.475889 degrees
then minus **32.00538321** degrees
thus equals**:** **42.47050579** degrees = arctan {**119 / 130**}

{**119 / 130**} **x 780** Mars synod = **714**

714 = 42 x 17 pointed Sumerian cylinder seal arch
714 = 14 x 51, then:
14 x 10 Royal Cubits
x Ancient Pi = 9072
Khufu Pyramid base in inches

FINAL CONCLUSION:

Two possibilties have been offered for the Teotihuacan Grids angles:

arctangent of the Inverse of **Sqrt. 13** = **15.50135957** degrees
and
arcsine of the Inverse of **Sqrt. 14** = **15.50135957** degrees

and then the simplified fractional forms:

arctangent {**100 / 360**} = **15.524111** degrees
and
arctangent {**100 / 338**} = **16.48127221** degrees

Though the first table clearly shows a closer angle to exact 15.5,
it is physically impossible to measure the angle differential found with the second table's arctangents, when comparing the results.

The difference is:
15.524111 minus 15.50135957 = 0.02275~ degrees.
The largest differential from exact 15.5 = .024111 degrees.

On site measurement can never differentiate such small angle differentials such that either calculated angle 15 .5 degree angle value is appropriately considerable. If you believe that ancient cultures fully calculated modern square roots, then the first table suffices as more exact.
Or, both the above are correct as models of Convergence Dynamics,
and possibly the Teotihuacans had a grasp of limited decimal square roots.

However as we have seen, the prospect of using modern square roots
in ancient cultures can only be accomplished by knowing exactly
where and how to round off each and every square root or constant
like Pi and Phi at the tenth placement {or more} just like a hand calculator does.
EVEN THEN, the process of rounding is not perfect or comprehensive,
and would lead to a plethora of miscalculations if used by the ancients.
Your hand calculator will automatically extend the decimal in memory,
but display a rounded figure:
Khufu slope tangent {**14 / 11**} = **1.27 27 27 27~** to infinity.
Hand calculator produces this with the actual fraction: **1.27 27 27 27 3**.
Like wise with Sqrt. 8, the last decimal placement is rounded to a 5.

As such, this would be a grand assumption to be made in the capacity
of ancient cultural mathematics, that Egyptians and Mayans actually used
pure square roots or pure Phi and Pi, when they had handy fractions to suffice.
Far more likely is the use of common fractions that can define the planetary time
lines in Khufu pyramid style cosmology, or the Mayan Tzolkin 260 and Mayan
Long Count 1872000, and the entire Egyptian Ancient Pi cosmologies.

Also to take into account is that I cannot find a modern square root
that converges directly to the Teotihuacan Grid 16.5 angle.

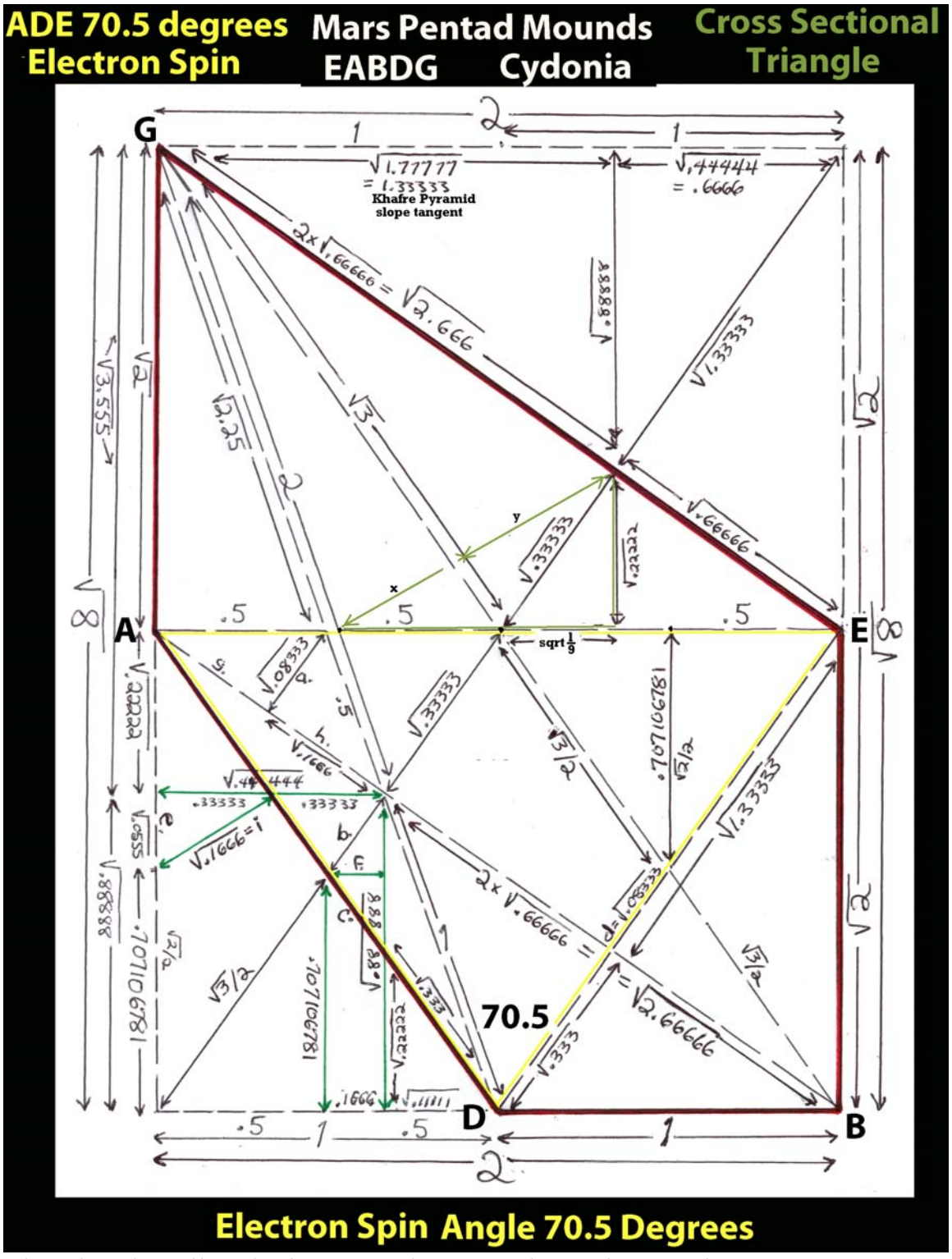
Another evidence pointing to the use of fractions was the result of
0.618055555~ = {**89 / 144**} found in the framework of the
two Teotihuacan angles combined. This is grandly profound!

The unique process of using sines, cosines, and tangents,
in squared inverses, or simply just inverses, or simply just squared,
is a dramatic methodology into the ancient cultural mathematics
of both ancient Egyptian to the much later Teotihuacan times.
No doubt at all that they applied this exact same methodology
to account for planetary movements and then transpose the mathematics into
actual sacred geometry pyramid design as is evidenced in the Khufu Pyramid.
Ideas:
The intended distance between the peaks of the Pyramid of the Sun
and the Pyramid of the Moon is **5280 feet / 2 = 2640 feet.**
The distance between the Pyramid of the Sun and the pyramid {peaks}
in the Temple of Quetzalcoatl is **3960** feet.
5280 / 3960 = 1.333333~ Khafre Pyramid slope
2640 / by 3960 = 0.666666~.
These values were seen on the internet as a pinch longer by satellite
measurement, which then had misinterpretations by the author IMO.
The Pyramid of the Sun has undergone many changes such
that true evaluation of angle and measurements is difficult.
I have seen in others measurements that one level of this pyramid
is extremely close to the Mars 687.27 27 27~ in feet.

Pyramid of the Sun
slope has been defined as close to {2 / Pi}.
This could easily also be {**2 / Ancient Pi**} = 32.47119229 degrees.
Teotihuacans could have used several fractions to attain such slope.
{355 / 113} = excruciatingly close convergent Pi
{15708 / 5000} = 3.1416
The entire Teotihuacan city is a masterpiece of sacred geometry.

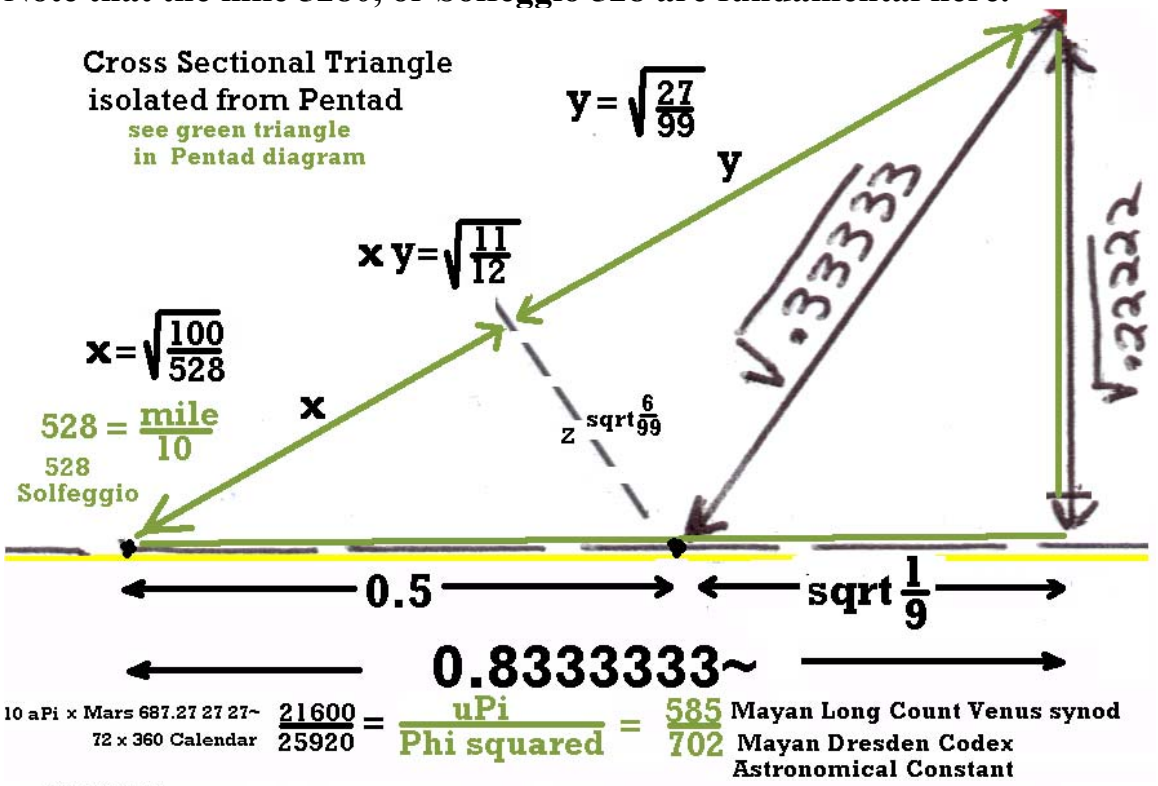
To that end I hope that I have added some new evidence
for the 15.5 and 16.5 angles of the City Grid.

The **70.5** degree Electron Spin Angle in the **Mars Pentad** Mounds angle of mounds **ADE,** is found in my Hexagonal pyramid as: **2 x** angle **b.**
Angle b = arctan Sqrt. 2 / by 2. = 35.26438968 degrees, then **x 2 = ADE**.
Thus precisely bisecting the pyramid 3 times in vertical planes, 3 pages below.
On the next page is the actual Mars Pentad in an analysis of lengths.
Angle **ADE** is clearly shown as **70.5** degrees.



The triangle yellow is the ADE electron spin angle 70.5 degrees.
The Triangle in green is a cross sectional angle within the Pentad geometry which will reveal Egyptian Ancient Pi Harmonic Code.
Lengths with 99 are associated to Ancient Pi: {99 / 63} = {aPi / 2}.

The Cross Sectional Triangle in green is magnified for display and analysis to reveal unusual lengths within the square roots.
Note that the mile 5280, or Solfeggio 528 are fundamental here.



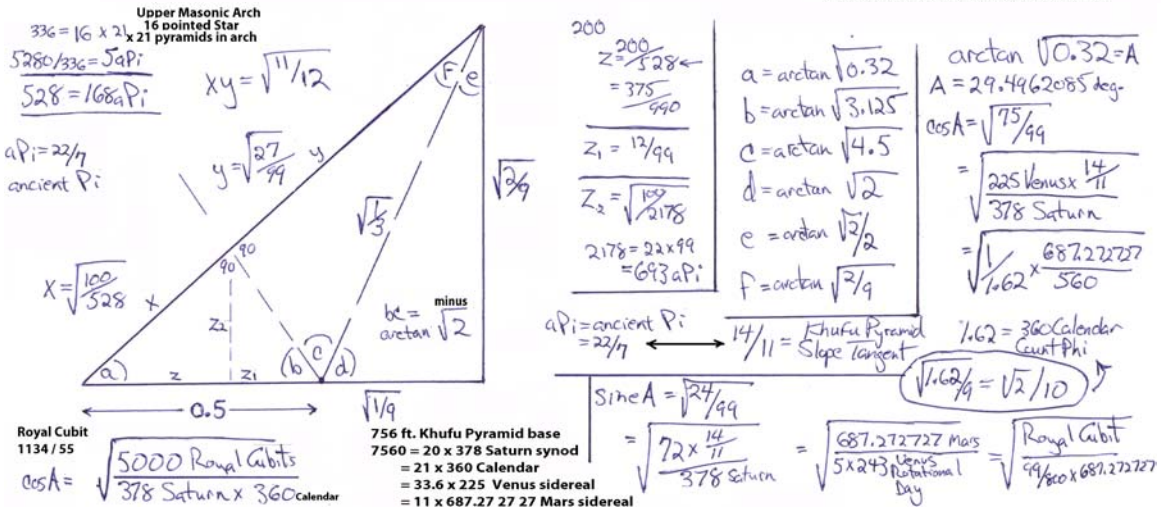


Image has been shortened horizontally to fit the frame. Please Magnify.
What is displayed is the bare backbone of what is possible in using the sines, cosines and tangents with the Egyptian Khufu pyramid Ancient Pi planetary timeline cosmology. This will work as well with the Mayan Long Count:

Cos A = Sqrt. {75 / 99} = Sqrt. MLC 1872000
260 Tzolkin x 3024 Ancient Pi

3024 in the equation equals Khufu Pyramid base 756 feet x 4 = 3024.
1872000 = 260 Tzolkin x modern Sqrt.2 x Sqrt. 25920000, where 25920000 = 360 x 7200.

This essentially proves that macrocosmic ancient cosmologic planetary calendar accounting exists within tetrahedral geometry, and within the framework of the tetrahedral grid represented by the 5 mounds EABDG at Cydonia on Mars. That is icing on the cosmic cake of the scientific electron spin displayed by the Mars Pentad as well. I can supply 50 pages calculative dynamics within this framework. This is not to say that ancient cultures had the complete capacity to operate such intensive square rooting.
The Mars Pentad is on Mars and that may answered as two different scenarios:

One is that an ancient civilization existed there at Cydonia,
and they displayed this same style of sacred geometry in their grand city,
just as Hue-Men did at Teotihuacan on Earth,
but were far more sophisticated using pure tetrahedral geometry grids
to formulate unified universal harmonic cosmology.

Remember: all math this can be converted to Phi geometry with Universal harmonic Pi ←-- !

The other option at Cydonia with the Pentad mounds evidence is that
there has been sophisticated alien intelligent intervention at the site,
which sits a few kilometers from The Face on Mars.
This would have to be as some kind of communicative Intent by
the actions of such "alien intervention".
A third option is that both scenarios are in fact true.

**Note that the angle f, as arctan Sqrt. {2 / 9},
has a cosine of Sqrt. {81 / 99},
and sine of Sqrt. {18 / 99}.**

arctan Sqrt. {2 / 9} = 25.23940182degrees. sine = Sqrt. {18 / 99}.

10 NASA Venus synods 584

Sqrt. {18 / 99} = Sqrt. 5840

Mercury sidereal 88 x 365 Earth

The Royal Cubit = 1134 / 55 = 20.618 18 18~

arctan Sqrt. {2 / 9} = 25.23940182degrees. cosine = Sqrt. {81 / 99}.

Sqrt. {81 / 99} = Sqrt. 10 Royal Cubits

Pascal triangle 252

Pascal 252 / by 378 Saturn synod = 2 / 3

The same process can be accomplished with modern square roots in converting the planetary time line mathematics obviously, since the Pentad tetrahedral geometry is constructed of modern square roots:

Length Sqrt. {6 / 99} = the Sqrt.s of: Sqrt. 8 Sqrt. 8
Sqrt. 2178 Sqrt. of {693 Ancient Pi}

Unfortunately one has to use another square root almost every time to in asuch operatuions to make the equations work, ie, one is taking a double square root of 8 there. One either has to use square roots or squares in the equations primarily
The usage of **Sqrt. 8** in equations can mathematically be an expression of **electron spin angle 70.5:** arctangent Sqrt. 8 = tetrahedral 70.528779347 deg.

angle f, sine = Sqrt. {18 / 99}
Sqrt. {18 / 99} = Sqrt. of: 1400 x Venus synod 584 squared x Ancient Pi
8 x Mercury 88 squared x Earth 365 squared

This above equation was achieved by using Sqrt. 8 by the ways.
With square root 8 one is using the arctangent to the electron spin angle.

angle a,
cos = Sqrt. {75 / 99} = Sqrt.s of: 52800 and 16800 Ancient Pi
69696 2 x Mercury 88 x 396 Solfeggio

69696 = 11 x 5280 x 1.2 and 1.2 = uPi / by Phi squared.

In the above case, the equation was accomplished with modern square root two, without having to display another square root or square.
There is a specific process to this which should be shown, so as to inform the reader how modern square root 2 and square root 8 were utilized.

Length Sqrt. {27 / 99} = Egyptian Phi squared $\frac{2.618\ 18\ 18\sim \times 5}{48}$

where 48 = $\frac{\text{Sqrt.8 x 528}}{\text{Sqrt. of \{968 = 11 x 88 Mercury sidereal\}}}$.

PS, the double sqrt. of 48, x 261 hypercube nets = Mars 687.

Main process uses sqrt. 8:
1. 10 Saturn synods **3780 / by Sqrt. 8 = Sqrt. 1786050** --→ 1786050 = 4725 x 378 Saturn synod.
Quick note: 4725 x 584 Venus synod = 7560 x 365 Earth = 4015 x 687.27 27~ Mars
: 4725 x 584 Venus synod = 12264 x 225 Venus sidereal = 7665 x 360 Calendar

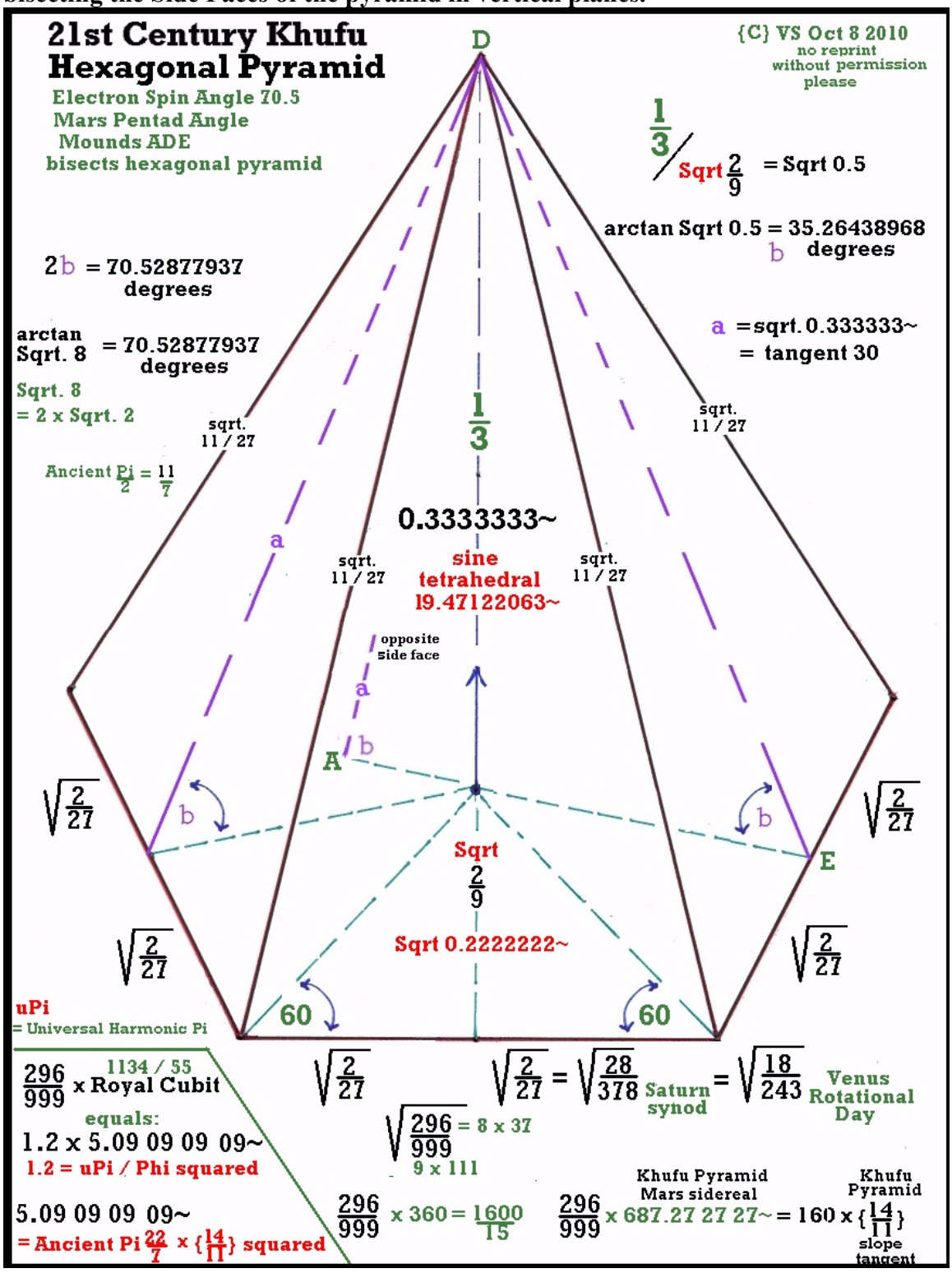
2. 10 Saturn synods **3780 / by Sqrt. 8 = Sqrt. 1786050 ----→ 1786050**
therefore one must multiply by the inverse of {**27 / 99**}:
1786050 x {99 / 27} = 6548850 ------→ 654850 = 17325 x 378 Saturn = 29102 x 225 Venus
thus:
1786050 / by 6548850 = 27 / 99.

3. {**27 / 99**} thus = $\frac{\text{{378 Saturn synod / Ancient Pi} x 14850}}{\text{22869 x 225 Venus x Khufu Pyramid tangent \{14 / 11\}}}$.

There are a plethora of applications with both the modern square roots, and the ancient systems of cosmologic numerologies..

Electron spin pyramid:

Hexagonal Pyramid has mounds ADE with 70.5 degree electron spin, bisecting the Side Faces of the pyramid in vertical planes.



angle b is shown on the center left there as the opposing side face to the side face that has mound E. Amazing results appear in the math conversions.
Revealed is a multiple of 111 in the math in the diagram as 999 in hex pyramids.
Both: **99 and 999** will create the replicating decimals.
99 / 63 = **Ancient Pi / by 2**, and **990 / 315 = Ancient Pi**.
999 = 9 x 111 = 27 x 37 ←----!
999 / 481 = 27 / 13 and 481 = 13 x 37, with 481 being a correlative value to the Khufu Pyramid height of: 481.09 09 09~ feet.
Note: **481 x 13 x 584 = 3651752**, a close Earth year value.
A few more examples of using modern square roots in the Pentad triangle math. What is found is that the ancient fractional approach is far more conveniently applied, whereas the usage of modern square roots remains a convoluted exercise, but it will operate in similar fashion to the ancient values applied, that are geared to Ancient Pi and that system of square roots { 99 / 70 x 140 / 99}.

angle a,
cos = Sqrt. {**75 / 99**}--------→ **Sqrt. 8 / by** {**75 / 99**} **= Sqrt. 13.9392 ←---use.**

13.9392 ------→ 139392000 = Mayan Baktun 144,000 x 968, **sidereal**
968 = 11 x 88 Mercury.

968 = 605 / by 0.625 --→ 0.625 = tangent of Teotihuacan grid angles combined.

Teotihuacan grid angles 15.524111 + 16.48127221 degrees = **arctan 0.625.**
In this equation is value 605:
605 x Khufu Pyramid Mars sidereal **687.27 27 27~ = 1100 x 378** Saturn synod.
605 = 770 / by Khufu Pyramid slope tangent {**14 / 11**}**.**
605 x Royal Cubit {1134 / 55} = 33 x 378 Saturn synod.

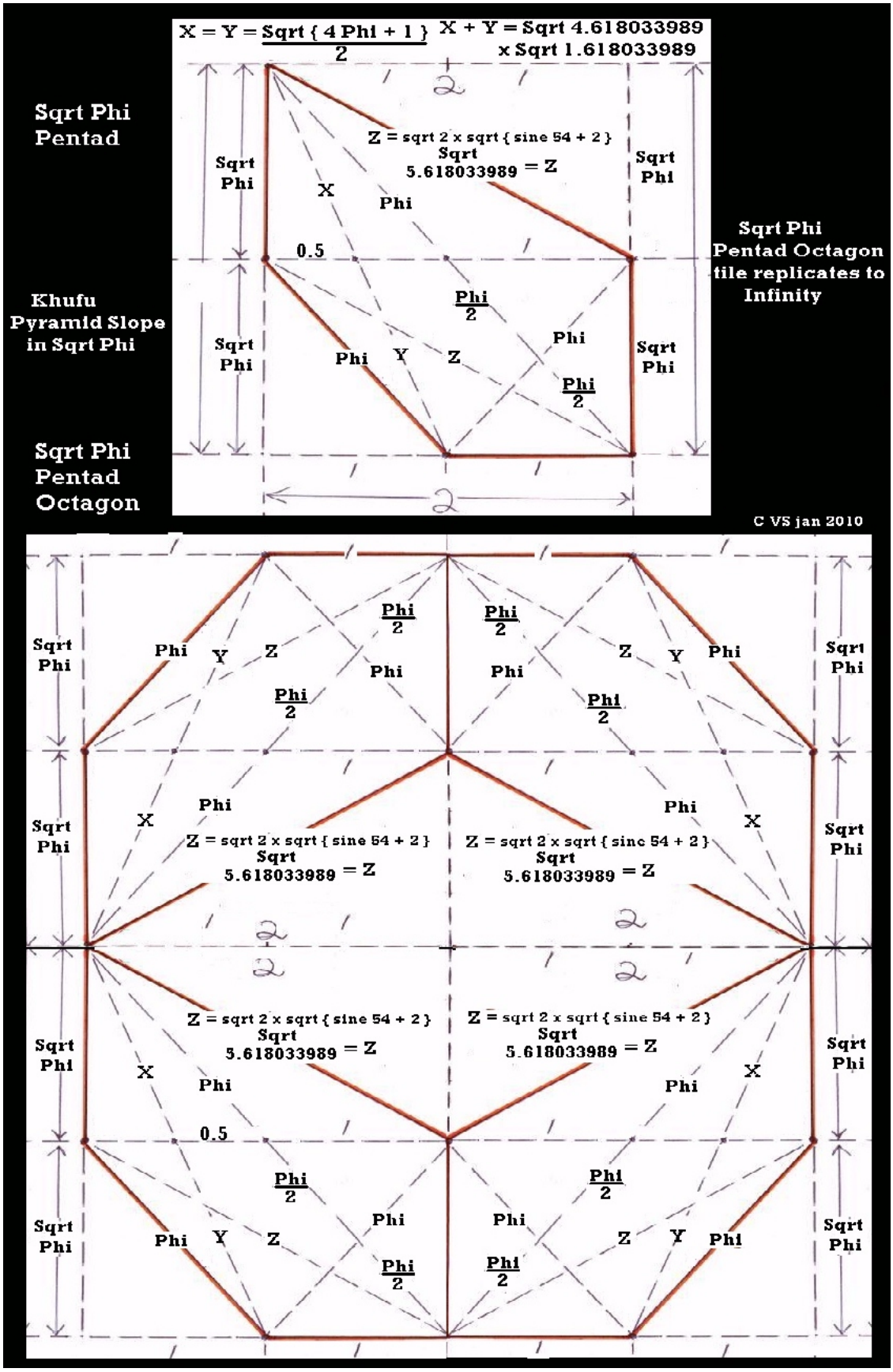
Back to using the math without modern square roots:

Note: **34848** x Teotihuacan grid angle 15.5 tangent {100 / 360} = **9680**.
34848 = 11088 x Ancient Pi.
34848 = 99 x 88 day Mercury sidereal x 4
34848 x {**75 / 99**} = 5 x 5280 mile = 50 x Solfeggio 528.

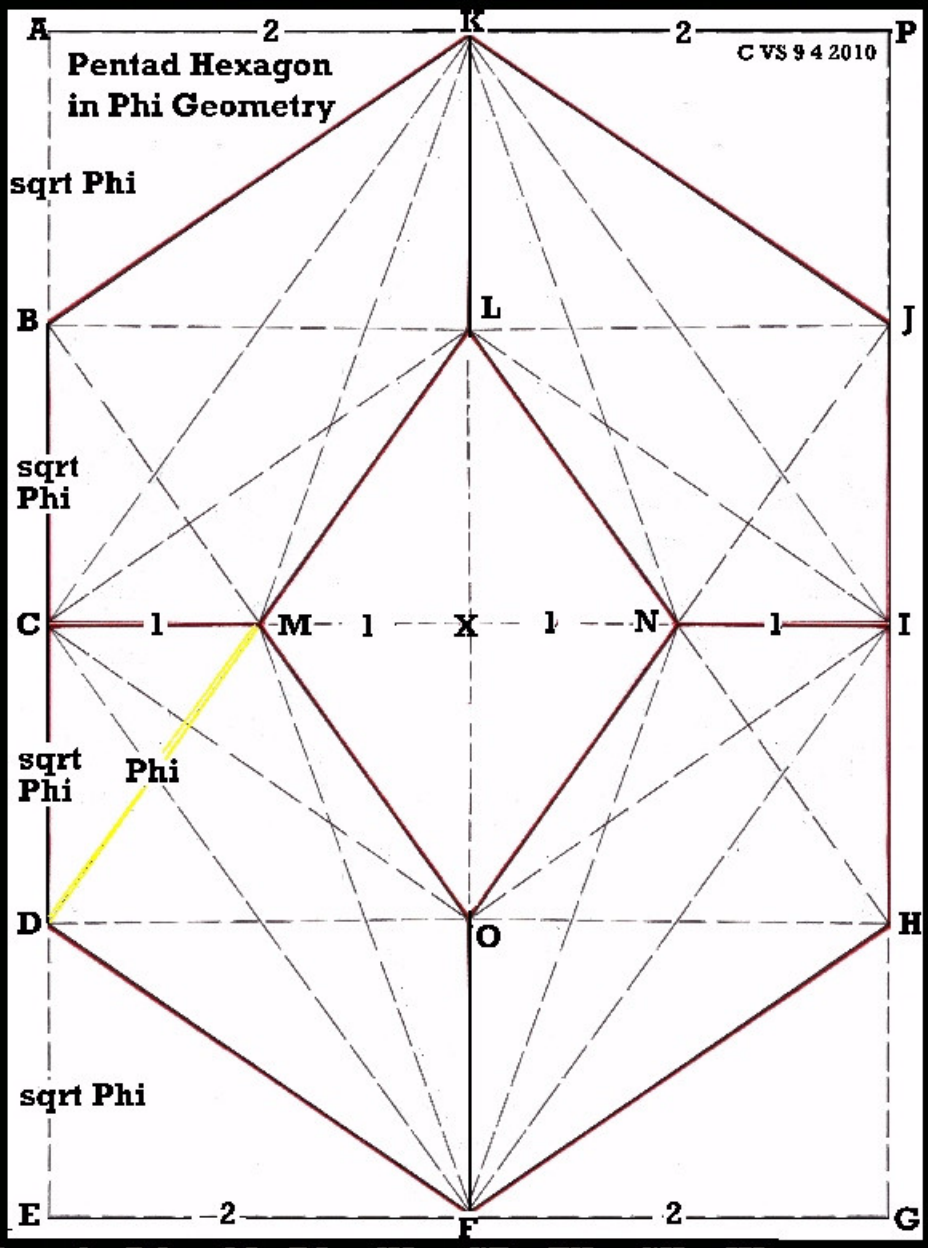
Cross sectional Pentad Triangle length Sqrt. {**6 / 99**} and Mayan Long Count {**MLC**}:
780 Mars synod **/ by** {**6 / 99**} = **12870.**
Note that this resultant value **12870** is a direct remix of MLC **1872000!**
Thus: 12870 / by MLC 1872000 = 0.006875 ←-----!
From earlier equations in my works:
0.006875 ----------→ 687.5
Pi value 3.14 18 18 18~ x 687.5 = 2160 = Mars 687.27 27 27~ x Ancient Pi

687.5 x 687.27 27 27~ = 472500, then / by Venus synod 584 = 1000 x sin 54.
Then:
4725 x 584 Venus synod = 7560 x 365 Earth = 7300 x 378 Saturn synod = 12264 x 225 Venus,
4725 x 584 Venus synod = 7665 x 360 Calendar = 4015 x 687.27 27 27~ Mars sidereal

The next two pages are Pentad Grids defined in Phi and sqrt. Phi.


X = Y = Sqrt { 4 Phi + 1 } / 2
X + Y = Sqrt 4.618033989 x Sqrt 1.618033989
Sqrt Phi Pentad
Z = sqrt 2 x sqrt { sine 54 + 2 }
Sqrt 5.618033989 = Z
Sqrt Phi
Phi
X
0.5
Phi/2
Y
Z
Khufu Pyramid Slope in Sqrt Phi
Sqrt Phi Pentad Octagon
Sqrt Phi Pentad Octagon tile replicates to Infinity
2
C VS jan 2010

A Pentad Hexagon in Phi and Sqrt Phi geometry



lengths BO = OJ =DL = HL = CF = FH = CK = IK
= Sqrt 10.47213596 = Sqrt {3.33333 x uPi}

lengths KB = KA = LC = LI = FD = FH = OI = OC
= Sqrt 5.618033989 = Sqrt 2 x {sine 54 + 2}

AM = EM = NG = NP = Sqrt{4 Phi + 1} = KN = KM = FM

CH = ID = CJ = BI = Sqrt 17.618033989 = Sqrt {sine 54+ 8}

GA = PE = Sqrt 41.8885438 = 4 Phi C VS 9 5 2010

41.8885438 = 13.33333~ x uPi 3.141640787

arctan Sqrt Phi = 51.8273 degreess

Khufu pyramid slope 51.84277~

21st Century Khufu Universal Harmonic Pi Pentagonal Pyramid

4 / uPi = 1 .273220037

Angle A = { 51 .85354759 }
arctan 1 .273220037

$$\frac{3\ .33333333}{2\ .618033989} = 1\ .273220037$$

a

C = sqrt 10 .47213596

$$\frac{10\ .47213596}{3\ .33333333} = \text{uPi}$$

sqrt 10 .47213596
= { sqrt 5 + 1 } = 2 Phi

10 .47213596
= 4 Phi sq.

tetrahedral
H = 10 sine 19 .47122063
H = { 3 .33333333~ }

a = Phi sq.
= 2 .618033989

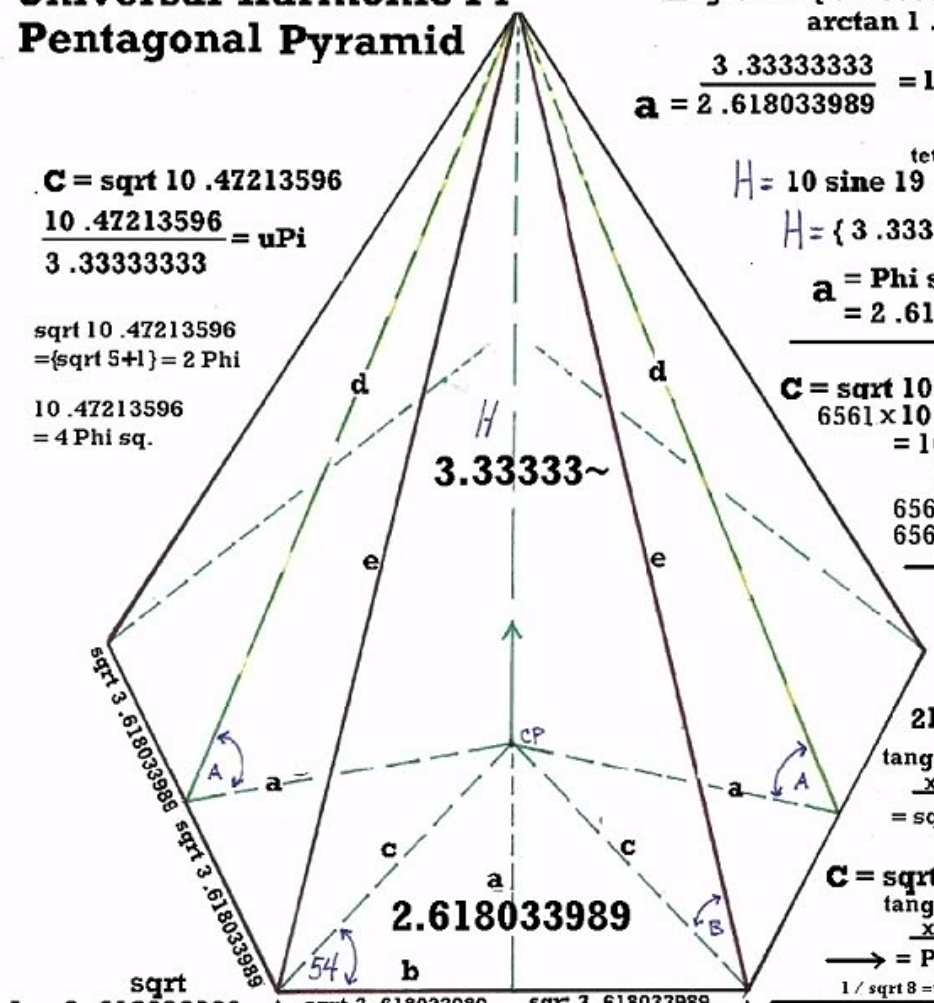
C = sqrt 10 .47213596
6561 x 10 .47213596
= 100 x Mars 687
687 . 0768403

6561 = 81 sq
6561 = 9sq twice

g

sqrt
2b = 14.47213596
tangent 19.47122063
x 14.47213596
= sqrt of { 10Phi sq }

C = sqrt 10 .47213596
tangent 19.47122063
x 10.47213596
⟶ = Phi sq. x Sqrt2
1 / sqrt 8 = tangent 19 .47122063



sqrt
b = 3 .618033999

sqrt 14 .47213596 = 2 b = sqrt 14 .47213596

4 Phi x sqrt5 = 14.47213596

4 x 3 .618033989 = 4Phi sq + 4 = 3.33333uPi + 4 = 14 .47213596

C = sqrt 10 .47213596
10 .47213596 x Mars synod 780 = X
X / by uPi = 2600 = 10 x Tzolkin 260

C = sqrt 10 .47213596
10 .47213596 xVenus synod 585 = X
X / by uPi = 1950

d = sqrt 17 .96521308 and 81 sq = 6561
6561, then / by 17 .96521308 = 365 .2057992 as Earth Year off by 1 hour
192 x Base Sqrt 3.618033989 = 365 .2057023

e = sqrt 21 .58324707 Mars sidereal = 687
21 .58324707 / by uPi = Mars sidereal / 100
21 .58324707 / by 3 .141640787 = 6 .87005566

192 x Sqrt 3.618033989 = 365 .205
192 / 144 = Khafre tangent 1.33333~
192x Phi sq./ 10uPi = Khafre 1.3333~
192 x 6561 = 5184 / Venus RD 243
192 x 6561 = 19440 RC x aPi

C = sqrt 10 .47213596

10 .47213596 x 5280 Mile or Solfeggio 528 = { x }
{ x } / by uPi = Mercury sidereal 88 x 200

192 x 10.47213596 = 640 uPi
192 x 3.33333~ = 640

NOTE: in the above pyramid the values multiplied by 192. {bottom right}.

192 = 12 x 16

12 x 16 pointed Masonic and Sumerian cylinder seal star,

16 = Ancient Pi {**22 / 7**} squared x {**14 / 11**}squared.

Khufu Pyramid slope tangent

12 = 10 uPi / by Phi squared

12 = 10 x Mayan Dresden Codex Astronomical Constant 7020

Mayan Long Count Venus synod 585

Look at Length 2b!

2b = Sqrt. 14.47213596~

14.47213596~ x Tangent 19.47122063 = 5.116672736

The square root of {10 x Phi squared} = 5.116672736

14.47213596~ = {3.333333~ x uPi} + 4

Also to note is length Sqrt. 10.47213596

10.47213596 = 3.3333333~ x uPi

10.47213596 = {Sqrt. 5 + 3} x 2.

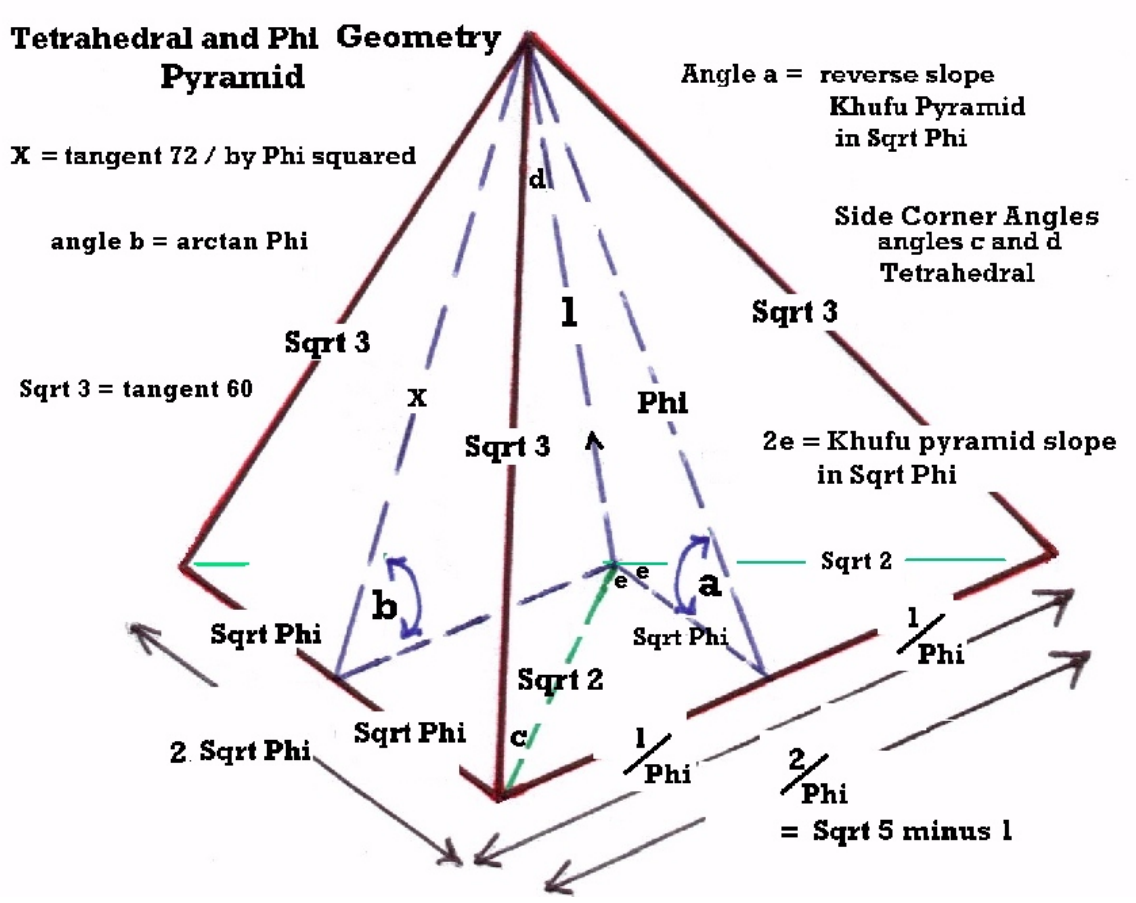


Table of Cubits with associated Pi values

using process formula:

1. 4 / by Pi value = arctangent for pyramid slope value
2. 540 x arctangent value = Mars sidereal value.
3. Mars sidereal value / by 33.3333333~ = cubit value.
   {use fraction 1000 / 30 for 33.333333~}

Pi values that legitimately place within the Petrie Royal Cubit:
20.615 to 20.625

Ancient Pi 22 / 7 = Royal Cubit 20.618 18 18~ = 1134 / 55

Harmonic Ancient Pi = $\frac{5600}{1782}$ = cubit 20.620 285714~ = $\frac{144342}{7000}$

Pi value 3.14 18 18 18~ = $\frac{1728}{550}$ = cubit 20.625 = $\frac{165}{8}$

modern Sqrt. 2 cubit = 20.61923374 = no usable fraction

Pi value 3.1425 = $\frac{1257}{400}$ = cubit 20.62052506

pi value 3.142580019 = cubit 20.62

Pi values that do not legitimately place within the
Petrie Royal Cubit: 20.615 to 20.625

modern Pi = 3.141592654~ = cubit 20.62648062

Universal Harmonic Pi = 3.141640787~ = cubit 20.62616461~= 54 / by Phi sq.

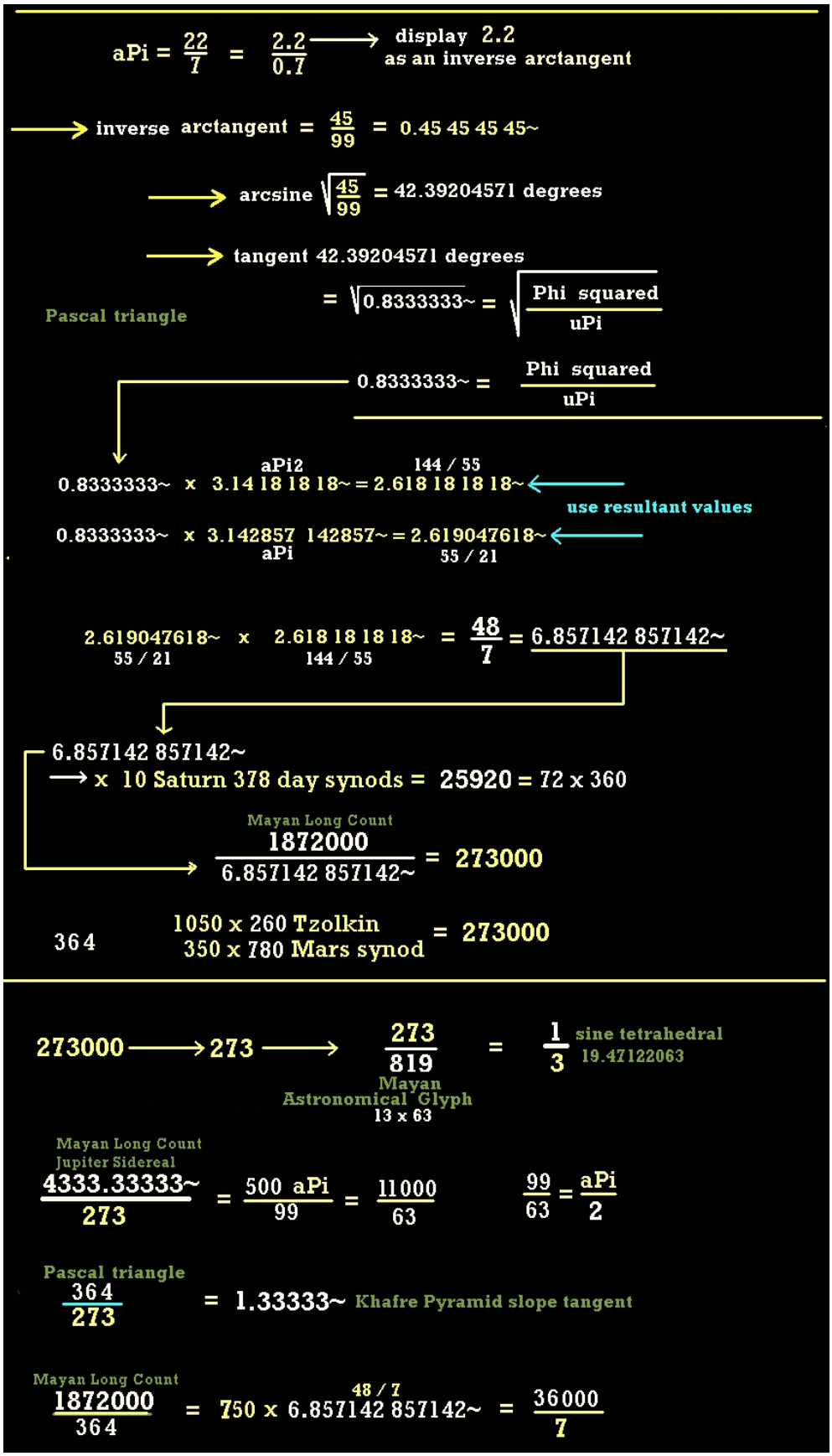
double Sqrt of fraction 2143 / 22 = 3.141592653 = cubit 20.62648063

Pi value 3.14166666~ = $\frac{377}{120}$ = cubit 20.62599469

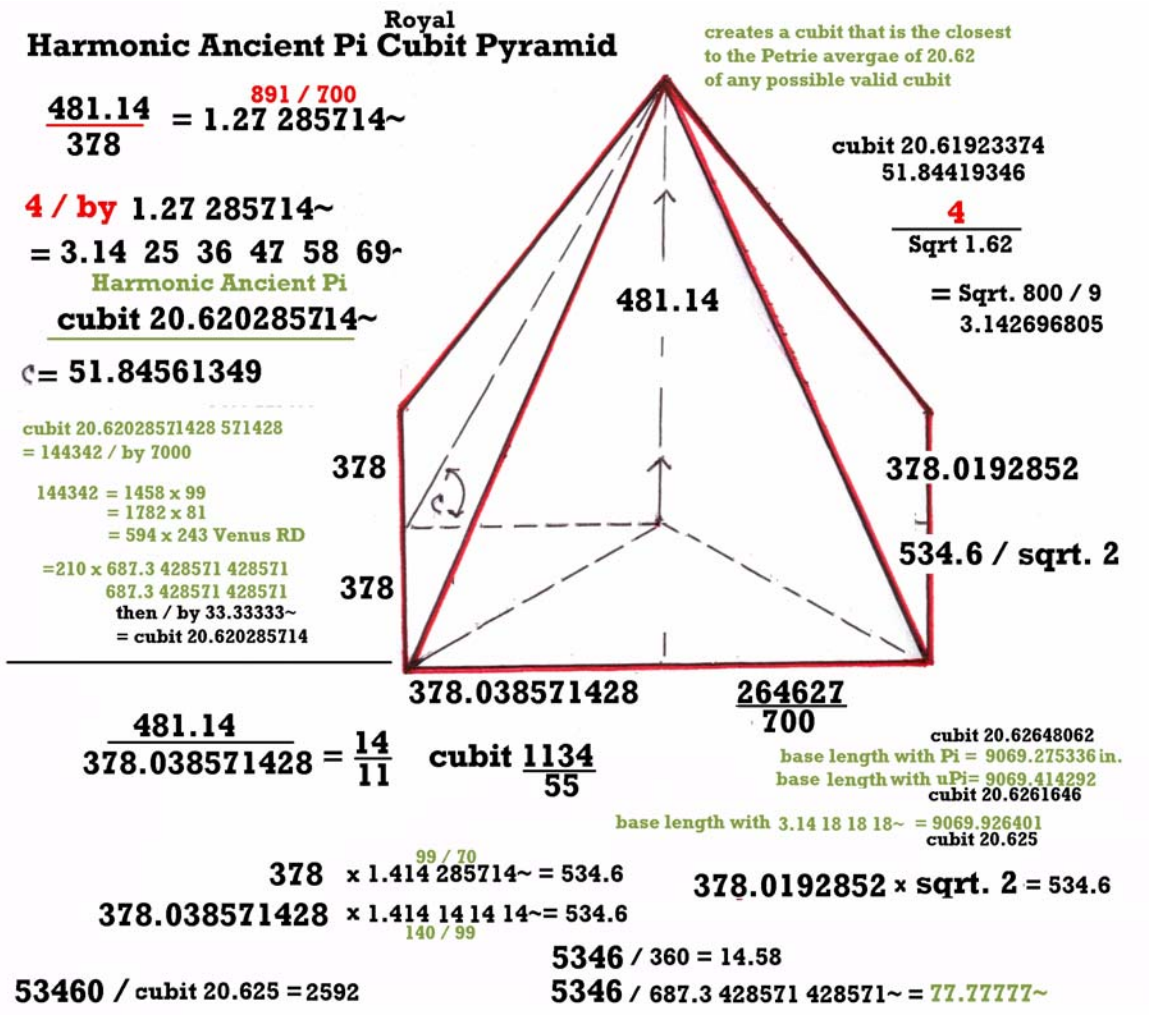
Pi value 3.1416 = $\frac{51051}{16250}$ = cubit 20.62643239

Pi value 3.14159292 = 355 / 113 = cubit 20.62647887

As one can observe here, modern Pi and any Pi value very close to it do not apply to the Petrie Royal Cubit final conclusion spread of 20.615 to 20.625 inches. This process I have developed in the January Royal Cubit pdf is infallible for assigning exact cubit values. Miscellaneous math next page:


aPi = 22/7 = 2.2/0.7 → display 2.2 as an inverse arctangent
→ inverse arctangent = 45/99 = 0.45 45 45 45~
→ arcsine √(45/99) = 42.39204571 degrees
→ tangent 42.39204571 degrees
= √0.8333333~ = √(Phi squared / uPi)
Pascal triangle
0.8333333~ = Phi squared / uPi
0.8333333~ x 3.14 18 18 18~ = 2.618 18 18 18~
aPi2
144 / 55
use resultant values
0.8333333~ x 3.142857 142857~ = 2.619047618~
aPi
55 / 21
2.619047618~ x 2.618 18 18 18~ = 48/7 = 6.857142 857142~
55 / 21
144 / 55
6.857142 857142~
→ x 10 Saturn 378 day synods = 25920 = 72 x 360
Mayan Long Count
1872000 / 6.857142 857142~ = 273000
364
1050 x 260 Tzolkin
350 x 780 Mars synod
= 273000
273000 → 273 → 273/819 = 1/3 sine tetrahedral
19.47122063
Mayan Astronomical Glyph
13 x 63
Mayan Long Count
Jupiter Sidereal
4333.33333~ / 273 = 500 aPi / 99 = 11000/63
99/63 = aPi/2
Pascal triangle
364/273 = 1.33333~ Khafre Pyramid slope tangent
Mayan Long Count
1872000/364 = 750 x 6.857142 857142~ = 36000/7
48 / 7

This is a pyramid that did not make it into pdf one.
This uses Harmonic Ancient Pi which creates a pinch greater height to the Khufu pyramid and as such the resultant cubit is the closest to the Petrie cubit spread.
Unusual mathematics emerge from this application of this Pi value,
and one sole problem occurs that displays itself in two lengths will exceed 756 feet when the only evidence is from Cole meausrements with one Khufu pyramid base length exceeding 756 feet.



Harmonic Ancient Pi = 3.14 25 36 47 58 69~ = 5600 / by 1782
Ancient Egyptian Pi = 22 / 7

Harmonic Ancient Pi x Ancient Pi
= replicating decimal value 9.87654320 987654320~ = 1600 / 162

9.87654320 987654320~ / by 8 = 1.23456790 123456790 = 200 / 162
1.23456790 123456790
equals Petrie style Menkaure pyramid 51 degree slope tangent

The Bent Pyramid

Upper Slope tangent = sqrt. { 8 / 9 } = sqrt 0.888888
= cosine tetrahedral 19.47122063

tangent sqrt. { 8 / 9 } = 0.942809037
In Egyptian Ancient Pi sevenths = 0.9428 571428 571428
= 66 / 70

Lower Slope tangent = 1.4

$x = 1.4 = \frac{\text{Phi x e}}{\text{Pi}}$ modern Pi and phi
e = 2.71828
1.400012642 actual result

Inverse slope = 1 / x = 5 / 7 = 0.714285 714285~
arcsine 5 / 7 = 45.5846914 deg.
tangent 45.5846914 deg. squared ←
= 1.04166666~
$= \frac{1950000}{1872000}$ Mayan Long Count

Tzolkin $\frac{260}{195}$ = 1.33333~ = Khafre slope tangent Mars $\frac{780}{195}$ = 4

---

arctan 1.4 = x degrees 7 x 756 = 5292
7 x 756 = sine x degrees squared = 0.662 162 162~
0.662 162 162~ = $\frac{5292}{7992}$ = 14 x 378 Saturn = 7.7 x 687 .27 27~ Mars
7992 = 111 x 72 = 216 x 37 note: 14 / 37 = 0.378 378 378

---

arctan 1.4 = x degrees
cosine x degrees squared = 0.3 378 378 378~
0.3 378 378 378~ = $\frac{2700}{7992}$ ⟶ 7992 / by 2592 = X
X times MLC = 12000 x 481

$\frac{260 \text{ Tzolkin}}{0.3\,378\,378\,378\sim} = 7696 = 16 \times 13 \times 37 = 16 \times 481$ (769.6 x 10)
Khufu pyramid height = 481.09 09 09~
$481 \times \frac{584 \text{ Venus}}{365 \text{ Earth}} = 769.6$

365.625 = Mayan Long Count Earth Year = 365.625
MLC 1872000 / by 365.625 = 5120 = 16 x 320

$\frac{365.625}{0.3\,378\,378\,378\sim} = 1082.25$
-----> 108225 = 225 Venus sidereal x 481

$\frac{585 \text{ Venus synod}}{0.3\,378\,378\,378\sim} = 17316 = 36 \times 481$

481 x 584 Venus = X
X / by 88 Mercury = Y
Y x 22 = 70226
sqrt 70226 = 265.0019

Upper Slope tangent = 0.9428 571428 571428
3 x Ancient Pi = 9.428 571428 571428

52 degree tangent 1.28 x 0.9428 571428 571428 =
= 5280 / 4375 = 1.206 857142 857142
x 7000 = 8448 = 16 x 528 Solfeggio
5280 Mile

Upper Slope tangent = 0.9428 571428 571428 = 66 / 70
0.9428 571428 571428
x 1.96 36 36 36~ tangent 68 deg.
{C} VS 8 28 2010 = 2.592 / 1.4 = 1296 / 700
25920 Platonic Age

Use Modern Pi and Phi to Connect to Ancient Pi Sevenths and the Bent Pyramid Tangent 1.4

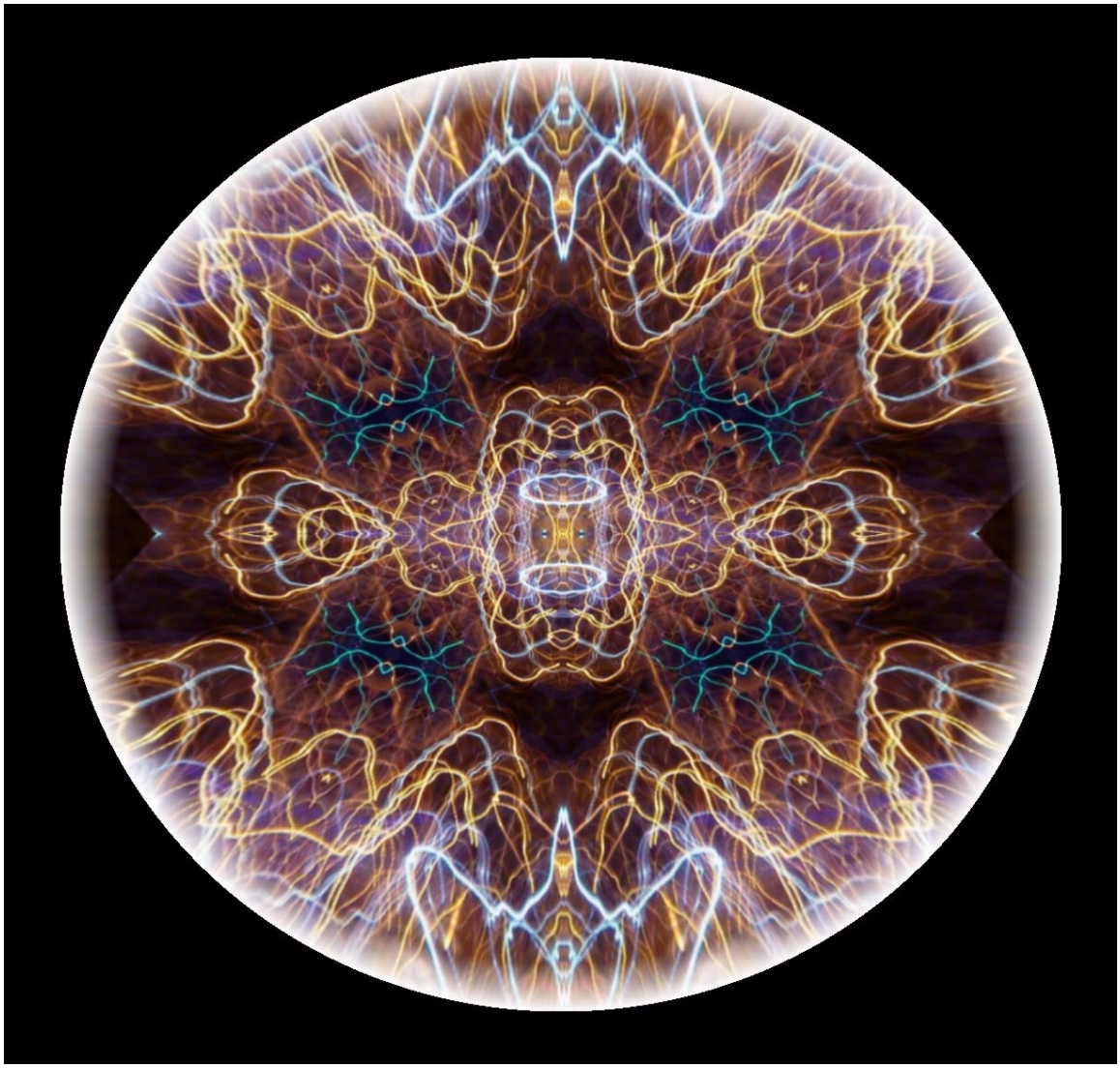
{ Pi / 2 } / by Sqrt. Phi = 1.234883696 Menkaure 50.99969
TIMES
Sqrt. 10 Phi / by Pi = 1.280394935 52.0098~ deg.

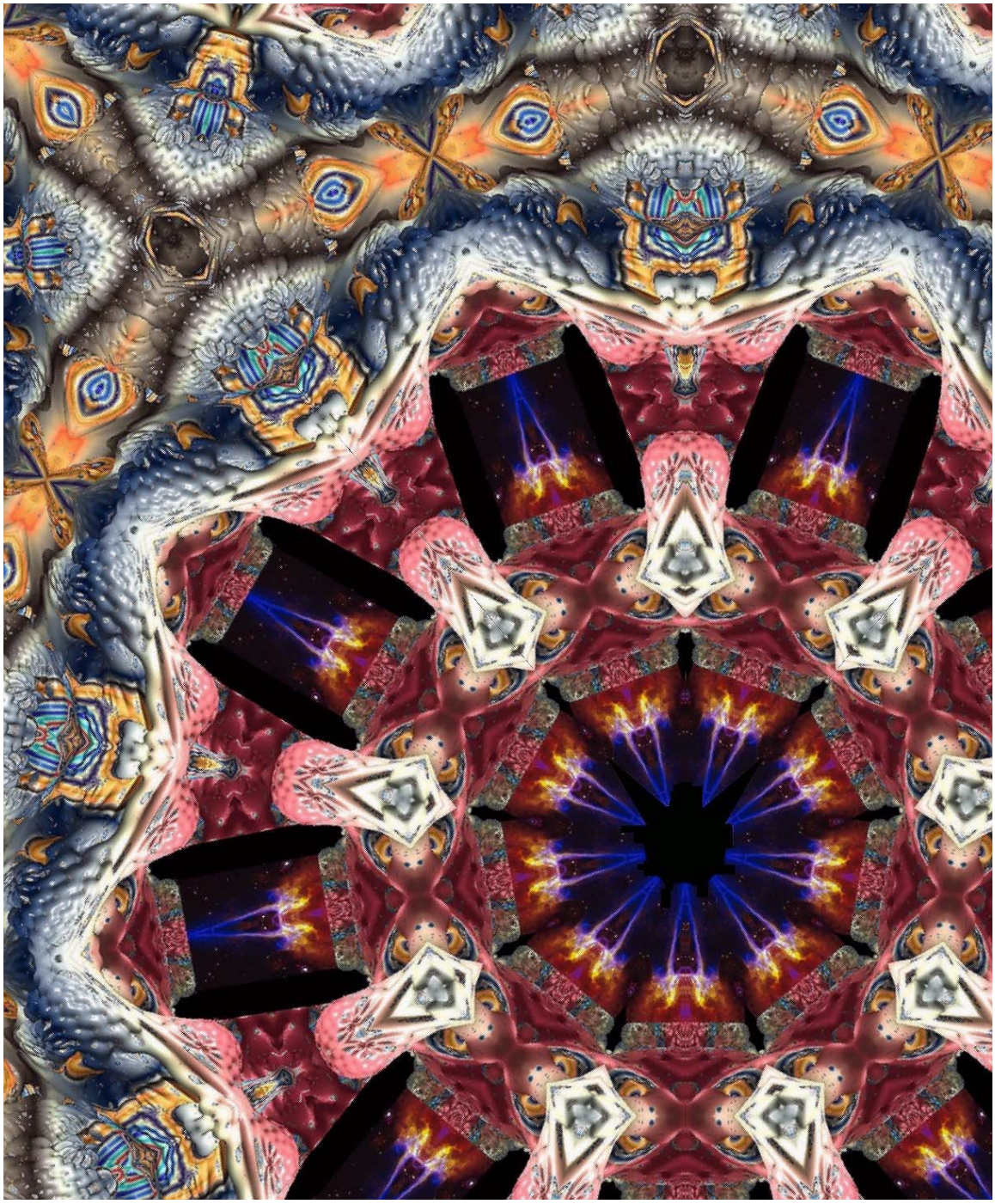
{C} VS 8 28 2010 = 1.58113883
arctan 1.58113883 = X degrees

1 / sine X degrees squared = 1.4 Exact
Bent Pyramid Lower Slope tangent = 1.4

Quantum Fractal Grid Art {C} VS

4D Alien GeometroSphynx is made of mountains.
The image is intended to show a giant neck and head
with an alienesque Annunaki style plumed serpent as a sky monument.





Mandelbulb fractal and Quantum Grid Art
{C} Kalter Rauch and VS

The Universal Harmonic Codes
Vic Showell recommended pdfs
Grand Unification of Modern and Ancient Mathematics
with Universal Harmonic Pi

The Royal Cubit in the Khufu, Khafre and Menkaure Pyramids
21st century Khufu Pentagonal Pyramid

Teotihuacan Grids
21st Century Hexagonal and Octagonal Pyramids