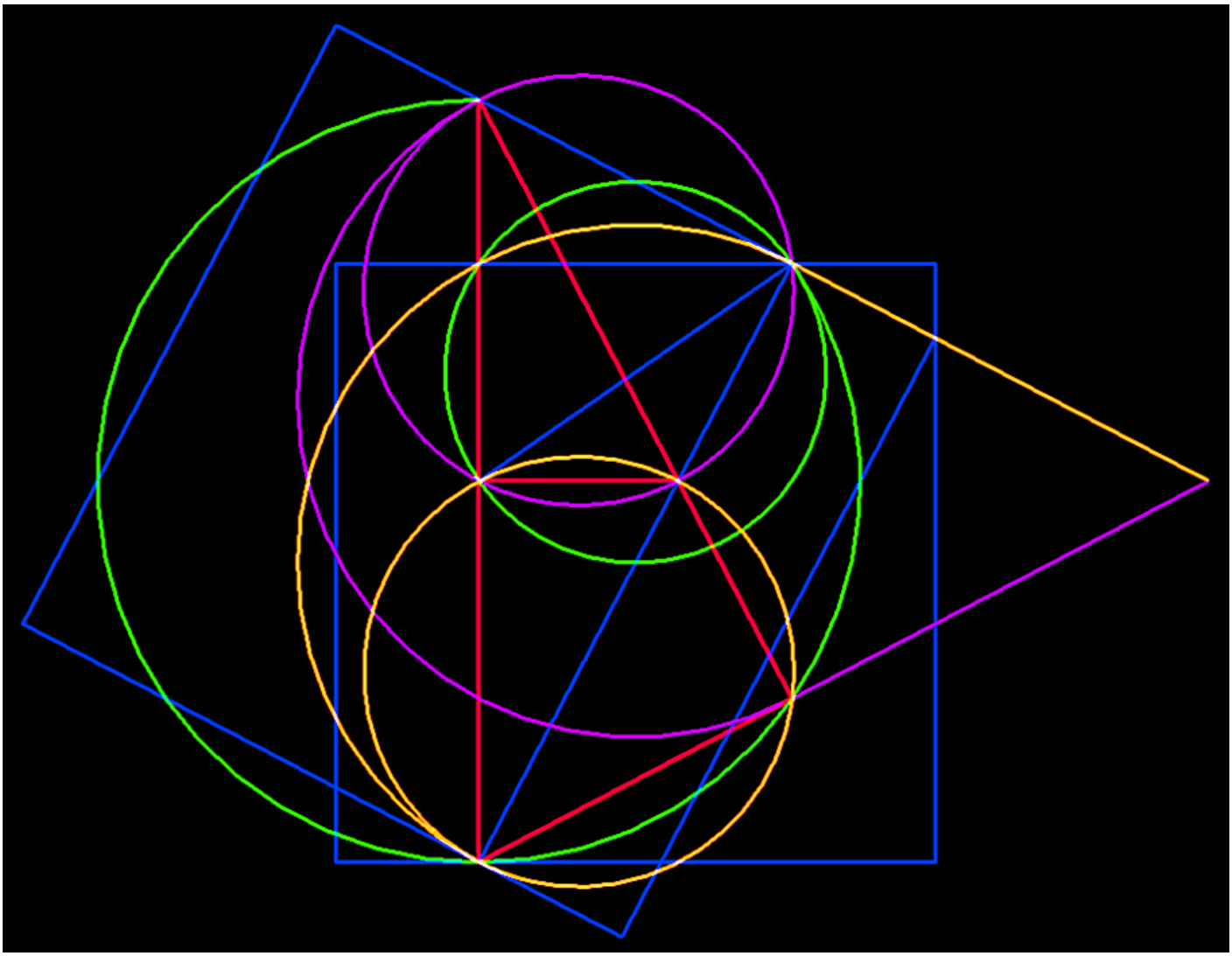
Veritas 27597e



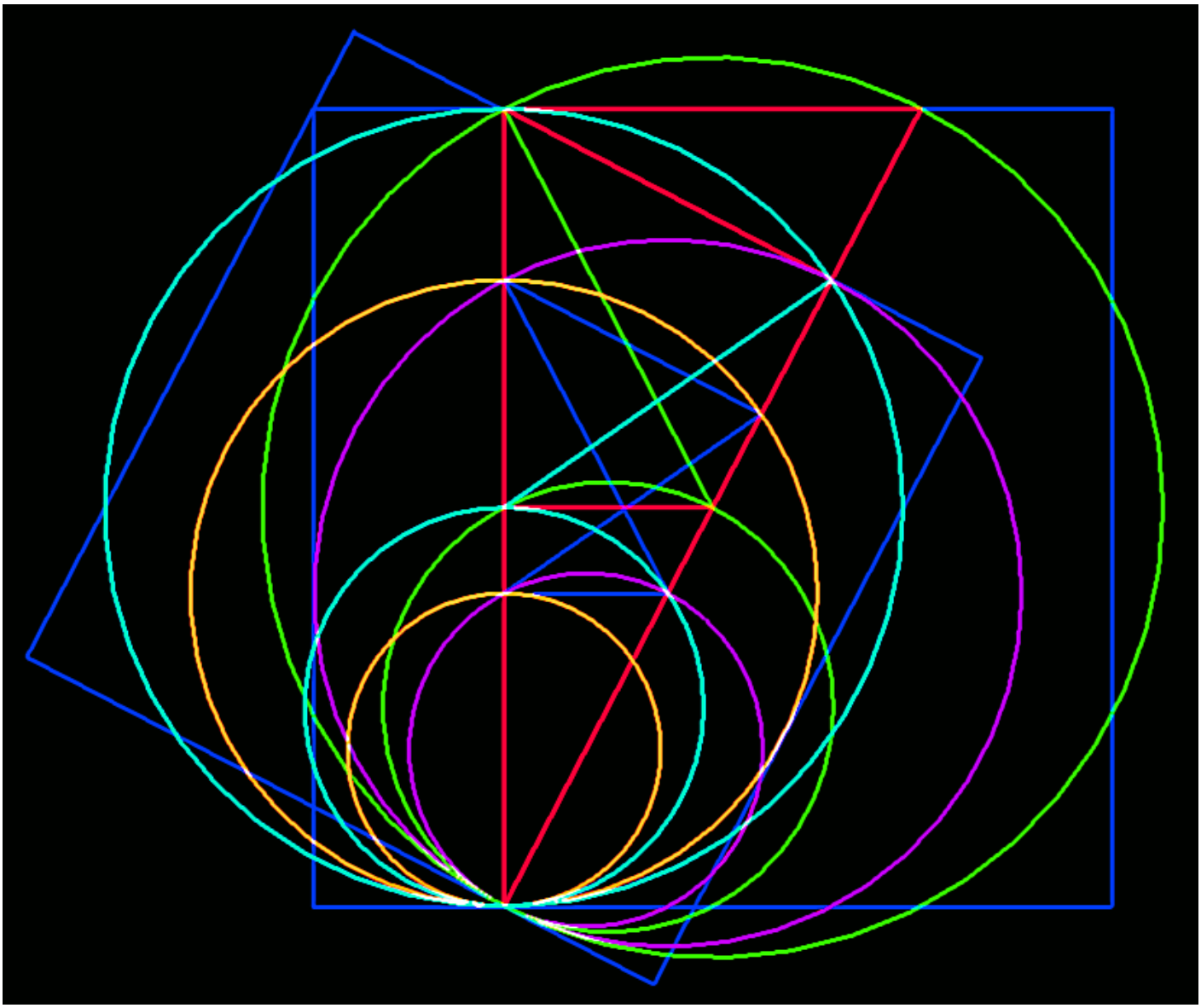
The common ratios (0.564..) and angles (27.597..) created by paired lines in Pythagorean, circle-squaring right triangles:

1.128379167095512573896158903121 5.. / 2
= 0.564189583547756286948079451560 77..

0.522723200877063315136797111952 72..
/ 0.926502750352208485842759667589 14..
= 0.564189583547756286948079451560 77..

1 / 1.772453850905516027298167483341 1..
= 0.564189583547756286948079451560 77..

Paleo Pi Pointers



Pythagorean, circle-squaring right triangles:
primitive, penetrating, and precise.

Nested squared circles of Paleo Pi Pointers, including geometric relationship to Pi/2:

D = 4(sqrt(1/Pi)), 2, sqrt(Pi), Pi/2,
D = 2(sqrt(1/Pi)), 1, sqrt(Pi)/2 s = side of square

2.256758334191025147792317806243O.. s = 2
2.000000000000000000000000000000.. s = sqrt(Pi)
1.772453850905516027298167483341l.. s = Pi/2
1.570796326794896619231321691639S.. s = 1.392..
1.128379167095512573896158903121S.. s = 1
1.000000000000000000000000000000.. s = sqrt(Pi)/2
0.886226925452758013649083741670S.. s = Pi/4

2.256758334191025147792317806243O.. 4(sqrt(1/Pi))

1.570796326794896619231321691639S.. Pi/2
x (1.128379167095512573896158903121S..)^2 = 2

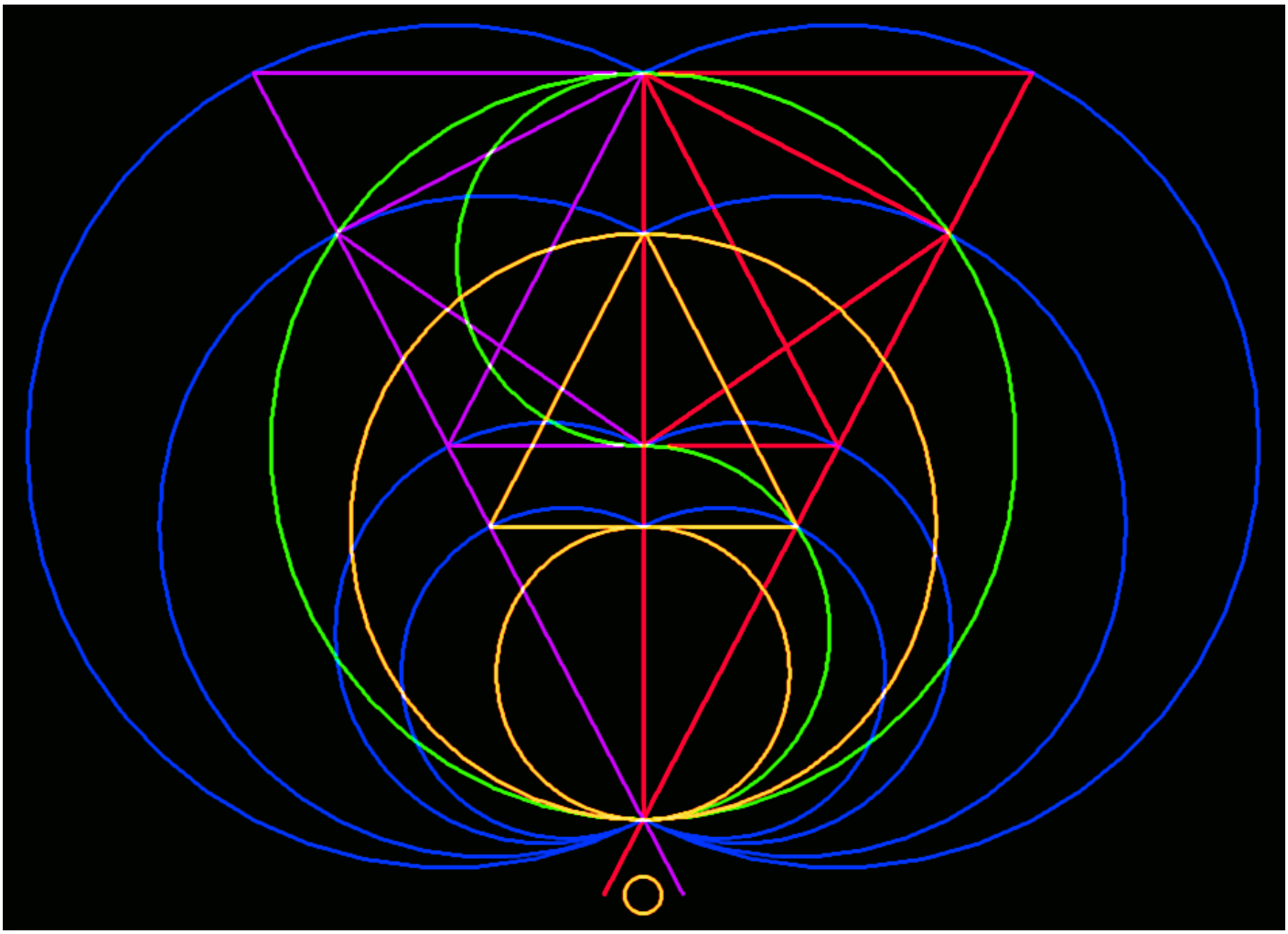
1.570796326794896619231321691639S.. Pi/2
x 1.128379167095512573896158903121S.. 2(sqrt(1/Pi))
= 1.772453850905516027298167483341l.. sqrt(Pi)

1.570796326794896619231321691639S.. Pi/2
x 0.636619772367581343075535053490O.. = 1

1.570796326794896619231321691639S.. Pi/2
x 0.564189583547756286948079451560l.. 2(sqrt(1/Pi))/2
= 0.886226925452758013649083741670S.. sqrt(Pi)/2

0.564189583547756286948079451560l.. 2(sqrt(1/Pi))/2
x 2 = 1.128379167095512573896158903121S.. 2(sqrt(1/Pi))
^ 2 = 1.273239544735162686151070106980l..
/ 2 = 0.636619772367581343075535053490O..

Pinary Vise (Little Bang Theory)



But that Pinary Vise! Where does it end? (or begin?)

4(sqrt(1/Pi))/2 = 2/(sqrt(Pi)) = sqrt(Pi)/(Pi/2)
= (Pi/2)/(Pi(sqrt(Pi)/4)) = 2(sqrt(1/Pi))

2.256758334191025147792317806242..
/ 1.128379167095512573896158903121 5..
= 2.0
/ 1.128379167095512573896158903121 5..
= 1.772453850905516027298167483341 1..
/ 1.128379167095512573896158903121 5..
= 1.570796326794896619231321691639 8..
/ 1.128379167095512573896158903121 5..
= 1.392081999207926961321204495530 4..

Pinary Vise

The mathematically-enclosing Pi values vise.
(distances between "bookends" decrease by /2,
beginning with bookends 4 ~ Pi ~ 2)

4
2
1
0.5
0.25
0.125
0.0625
0.03125
0.015625
0.0078125
0.00390625
0.001953125
0.0009765625

... as Pi decreases by /2:

3.14159265358979323846264338327 95..
1.57079632679489661923132169163 98..
0.78539816339744830961566084581988..
0.39269908169872415480783042290994..
0.19634954084936207740391521145497..
0.09817477042468103870195760572 7484..
0.04908738521234051935097880286 3742..
0.02454369260617025967548940143 1871..
0.01227184630308512983774470071 5936..
0.00613592315154256491887235035 79678..
0.00306796157577128245943617517 89839..
0.00153398078788564122971808758 94919..

“In complex problem analysis, when the problem can be isolated between ‘here and there’, the chances of resolving the problem are good! But that Pinary Vise! Where does it end? (or begin?)”

In the mathematical Pinary Vise, "pinary" refers to binary decrements of the starting values and "vise" refers to the vise-like squeeze of Pi between its "bookends" as the three values decrease by a factor of 2. The mystique is that the significance of the Pi values squeeze is debatable and that the bookend distances from the Pi decrement are in the precise 2/3 to 1/3 proportion: 2(sqrt(1/Pi))^2 to (2(sqrt(1/Pi))^2)/2.

In this continuum that lists binary decrements of Pi and their decrements_of_2 bookends, the distance (value) between the two bookends is a constant factor of .5 (decreasing values) and 2 (increasing values); relative distances between Pi and its bookends remain constant:

1.27323954473516268615107010698 01.. 2(sqrt(1/Pi))^2
~ Pi decrement ~
0.63661977236758134307553505349 00.. (2(sqrt(1/Pi))^2)/2

Selected bookend values divided by 2:

4
2
1
0.5
0.25
0.125
0.0625
0.03125
0.015625
0.0078125
0.00390625
0.001953125
0.0009765625

Selected Pi values divided by 2:

3.14159265358979323846264338327 95..
1.57079632679489661923132169163 98..
0.78539816339744830961566084581 988..
0.39269908169872415480783042290 994..
0.19634954084936207740391521145 497..
0.09817477042468103870195760572 7484..
0.04908738521234051935097880286 3742..
0.02454369260617025967548940143 1871..
0.01227184630308512983774470071 5936..
0.00613592315154256491887235035 79678..
0.00306796157577128245943617517 89839..
0.00153398078788564122971808758 94919..

Selected bookends (rightmost digits reflect truncation/rounding)

[calculate up/down from Pi/1, Pi/2, Pi/4, Pi/8]

= 4.0 [Bookends 4.0 ~ Pi/1 ~ 2.0]
x 1.12837916709551257389615890312 15..
= 3.54490770181103205459633496668 06.. 2(sqrt(Pi))
x 1.12837916709551257389615890312 15..
> 3.14159265358979323846264338327 95.. Pi/1
x 0.63661977236758134307553505349 00..
= 2.0

= 2.0 [Bookends 2.0 ~ Pi/2 ~ 1.0]
x 1.12837916709551257389615890312 15..
= 1.77245385090551602729816748334 11.. sqrt(Pi)
x 1.12837916709551257389615890312 15..
> 1.57079632679489661923132169163 98.. Pi/2
x 0.63661977236758134307553505349 00..
= 1.0

= 1.0 [Bookends 1.0 ~ Pi/4 ~ 0.5]
x 1.27323954473516268615107010698 01..
> 0.78539816339744830961566084581 98.. Pi/4
x 0.63661977236758134307553505349 00..
= 0.5

= 0.5 [Bookends 0.5 ~ Pi/8 ~ 0.25]
x 1.27323954473516268615107010698 01..
> 0.39269908169872415480783042290 99.. Pi/8
x 0.63661977236758134307553505349 00..
= 0.25

Supporting numbers:

2 - .42920367320510338076867830836 1.. = Pi/2
1 + .57079632679489661923132169163 9.. = Pi/2
= 1.00000000000000000000000000000

0.31830988618379067153776752674503.. 1/Pi
x 2 = 0.63661977236758134307553505349 00..
x 2 = 1.27323954473516268615107010698 01..

0.56418958354775628694807945156077.. sqrt(1/Pi)
x 2 = 1.12837916709551257389615890312 15..
^ 2 = 1.27323954473516268615107010698 01..
/ 2 = 0.63661977236758134307553505349 00..

[Derivation of 2/3 to 1/3 proportion (example)]

2(sqrt(1/Pi))
= 1.128379167095512573896158903121 5..
^2 = 1.273239544735162686151070106980 1..
/ 2 = 0.636619772367581343075535053490 0..

1.273239544735162686151070106980 1..
+ 0.636619772367581343075535053490 0..
= 1.909859317102744029226605160471..

1.273239544735162686151070106980 1..
/ 1.909859317102744029226605160471..
= 0.666666666666666666666666666666667.. 2/3
0.636619772367581343075535053490 0..
/ 1.909859317102744029226605160471..
= 0.333333333333333333333333333333333.. 1/3

1.909859317102744029226605160471..
/ 6 = 0.318309886183790671537767526745.. = 1/Pi
3.141592653589793238462643383279 5..
x 0.318309886183790671537767526745.. = 1.0

1.909859317102744029226605160471..
/ 1.273239544735162686151070106980 1.. = 1.5
1.909859317102744029226605160471..
/ 0.636619772367581343075535053490 0.. = 3.0

(calculate up/down from Pi)

= 4.0
x 1.128379167095512573896158903121 5..
= 3.544907701811032054596334966680 6.. 2(sqrt(Pi))
x 1.128379167095512573896158903121 5..
> 3.141592653589793238462643383279 5.. Pi
x 0.636619772367581343075535053490 0..
= 2.0

= 4.0
x 1.273239544735162686151070106980 1..
> 3.141592653589793238462643383279 5.. Pi
x 0.636619772367581343075535053490 0..
= 2.0

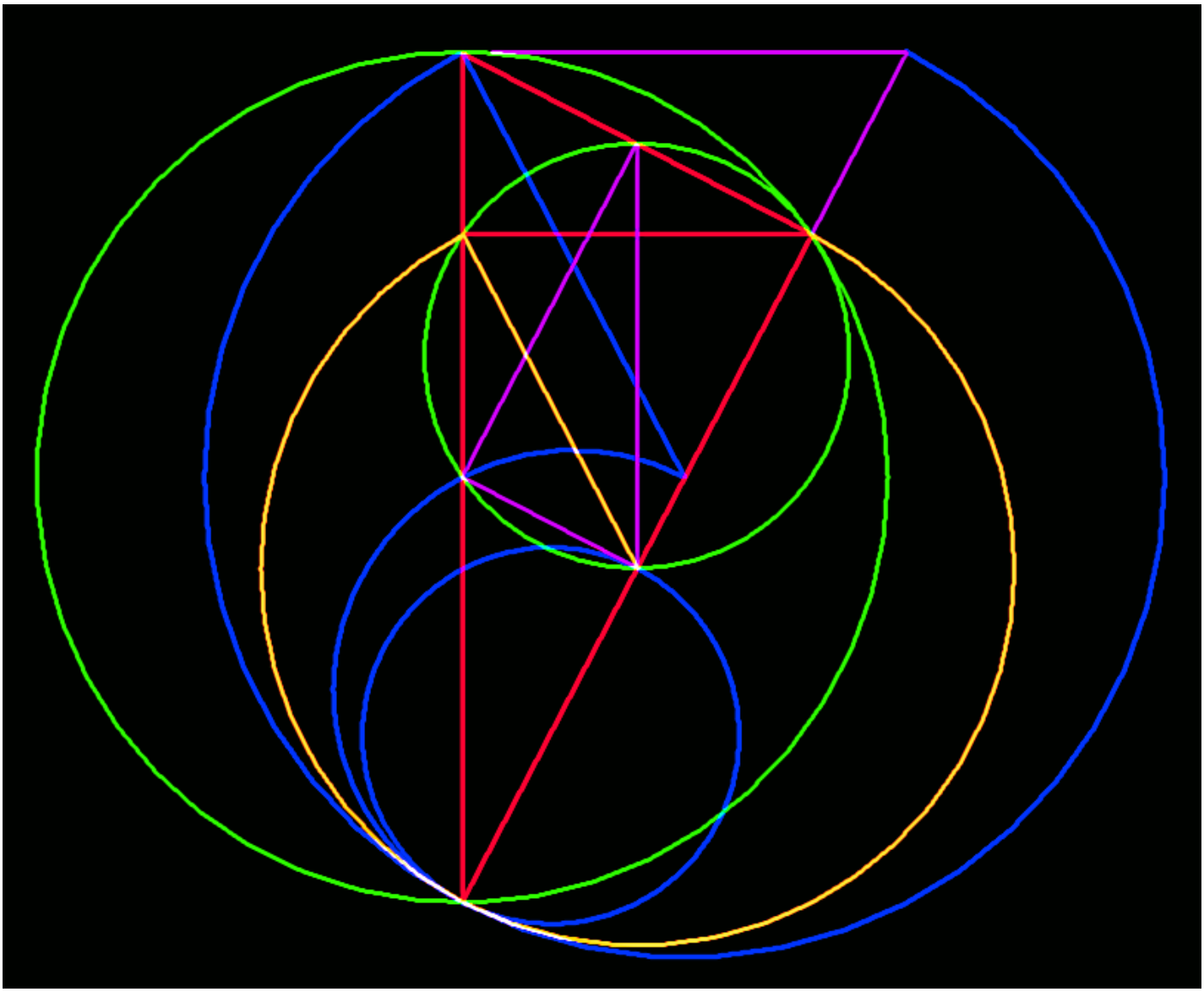
[2/3 to 1/3 pattern table for Bookend 4.0 ~ Pi ~ 2.0]

4.0 / 3.30 = 1.212
4.0 / 3.20 = 1.250
4.0 / 3.14 = 1.273 Pi
4.0 / 3.10 = 1.290
4.0 / 3.00 = 1.333
2.0 / 3.00 = 0.666
2.0 / 3.10 = 0.645
2.0 / 3.14 = 0.636 Pi
2.0 / 3.20 = 0.625
2.0 / 3.30 = 0.606

[Bookends pattern persistence table]
(4/2 ratio maintained as Pi decrements)

[4.00000 ~ Pi/01 ~ 2.00000] 4(1) = 4/2 = 1(2)
[2.00000 ~ Pi/02 ~ 1.00000] 2(2) = 4/2 = 2(1)
[1.00000 ~ Pi/04 ~ 0.50000] 1(4)= 4/2 = 4(.5)
[0.50000 ~ Pi/08 ~ 0.25000] .5(8) = 4/2 = 8(.25)
[0.25000 ~ Pi/16 ~ 0.12500] .25(16) = 4/2 = 16(.125)
[0.12500 ~ Pi/32 ~ 0.06250] .125(32) = 4/2 = 32(.0625)
[0.06250 ~ Pi/64 ~ 0.03125] .0625(64) = 4/2 = 64(.03125)

CosPi 2.0



Scintillating cosine waves of squared circles.

Right Triangle Relationships

of 2.0, sqrt(Pi), and Pi/2 in CosPi 2.0

[cosine = adjacent side / hypotenuse]

hyp = 2.0, adj = sqrt(Pi)
1.77245385090551602729816748334l1.. sqrt(Pi)
/ 2.0
= 0.88622692545275801364908374167022.. = cos = sqrt(Pi)/2

cos(0.88622692545275801364908374167022..) cos(adj/hyp)
= 27.597112635690604451732204752382.. degrees

hyp = sqrt(Pi), adj = Pi/2
1.57079632679489661923132169163981. Pi/2
/ 1.77245385090551602729816748334l1.. sqrt(Pi)
= 0.88622692545275801364908374167022.. = cos = sqrt(Pi)/2

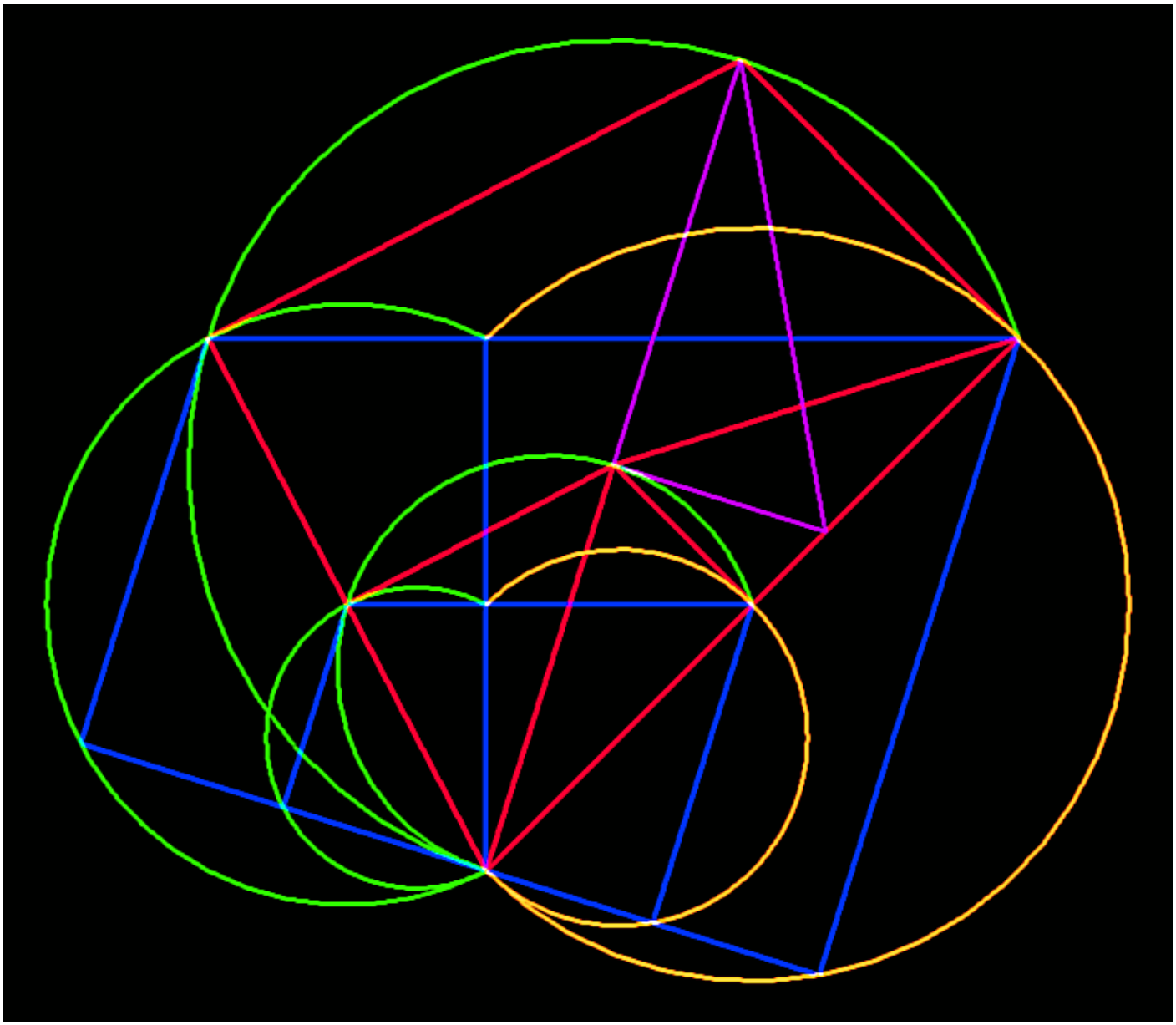
cos(0.88622692545275801364908374167022..) cos(adj/hyp)
= 27.597112635690604451732204752382.. degrees

Triangles have similar ratios: hyp/adj

2.0 2.0
/ 1.77245385090551602729816748334l1.. sqrt(Pi)
= 1.12837916709551257389615890312l..

1.77245385090551602729816748334l1.. sqrt(Pi)
/ 1.57079632679489661923132169163981. Pi/2
= 1.12837916709551257389615890312l..

Tripartite Soul



Squared circle harmony of
2, sqrt(2), 1, sqrt(2)/2, and sqrt(Pi)
in a correlation of six similar quadrilaterals.

sqrt(Pi) : 2 ~ 1 : 2(sqrt(1/Pi))

Geometry numbers of Tripartite Soul

(to calculate side of circle's square)

D = 2.0
/ 1.12837916709551257389615890312 15.. 2(sqrt(1/Pi))
= 1.77245385090551602729816748334 11.. sqrt(Pi)
D = 1.41421356237309504880168872420 97.. sqrt(2)
/ 1.12837916709551257389615890312 15.. 2(sqrt(1/Pi))
= 1.25331413731550025120788264240 55.. sqrt(Pi/2)
D = 1.0
/ 1.12837916709551257389615890312 15..
= 0.88622692545275801364908374167 057.. sqrt(Pi)/2

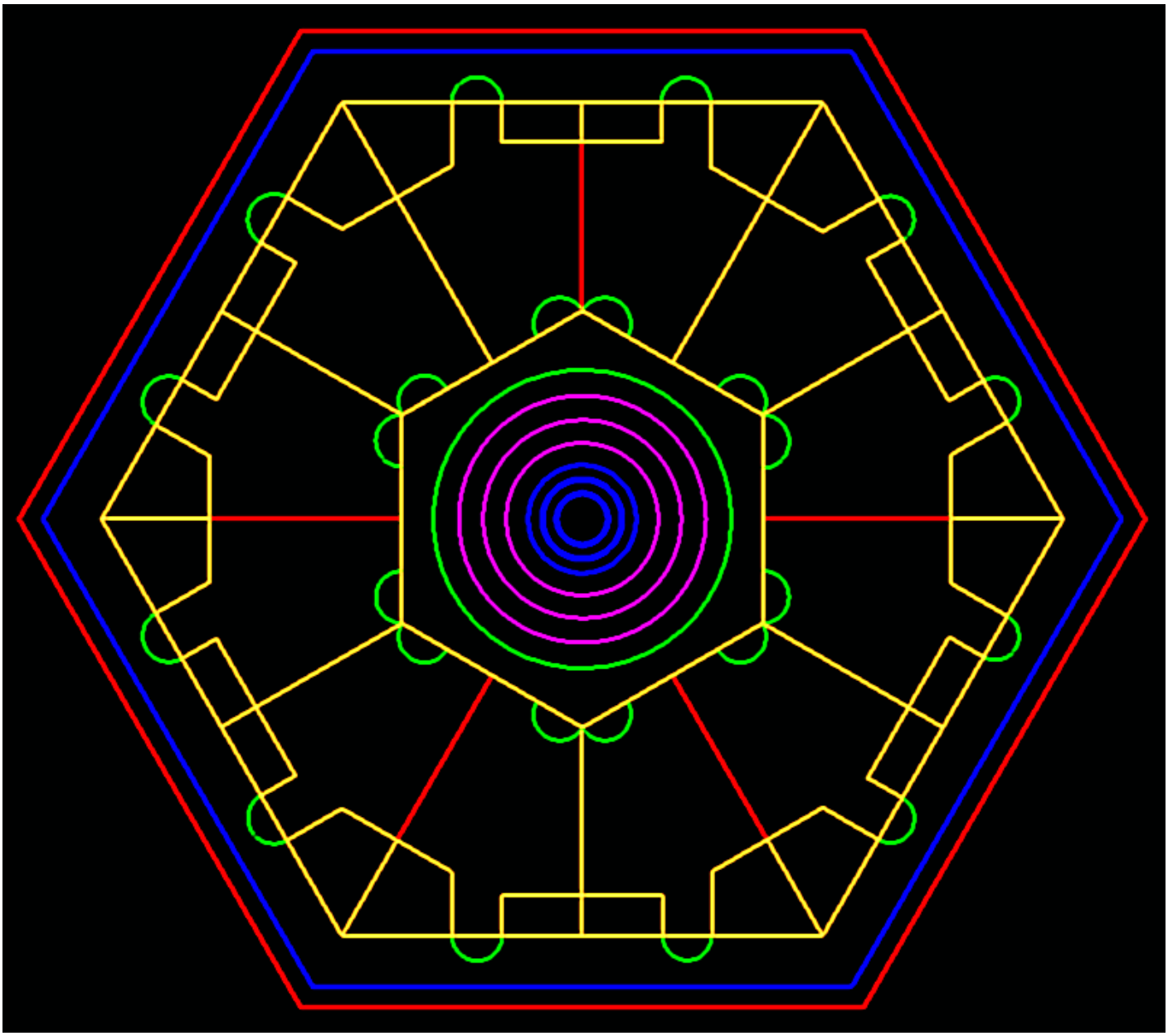
D = 1.77245385090551602729816748334 11.. sqrt(Pi)
/ 1.12837916709551257389615890312 15..
= 1.57079632679489661923132169164 05.. Pi/2

For reference (smallest circle in progression):

D = 0.70710678118654752440084436210 485.. sqrt(2)/2
/ 1.12837916709551257389615890312 15.. 2(sqrt(1/Pi))
= 0.62665706865775012560394132120 276.. sqrt(Pi/2)/2
D = 0.70710678118654752440084436210 485.. sqrt(2)/2
x 0.88622692545275801364908374167 057.. sqrt(pi)/2
= 0.62665706865775012560394132120 276.. sqrt(Pi/2)/2

1.12837916709551257389615890312 15..
x 0.88622692545275801364908374167 057.. = 1
1.12837916709551257389615890312 15..
x 1.77245385090551602729816748334 11.. = 2
2.25675833419102514779231780624 2..
x 0.88622692545275801364908374167 057.. = 2
2.25675833419102514779231780624 2..
x 1.77245385090551602729816748334 11.. = 4

Floor Plan 001



“Six of one, half a dozen of the other.”