The Anti-Significand
and
A Possible Maya Method of Ancient Math
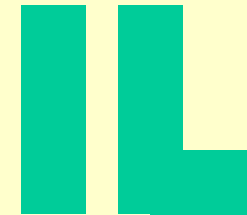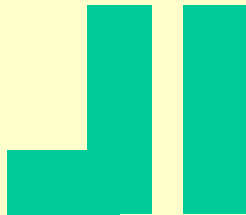
Charles William Johnson
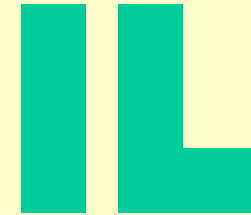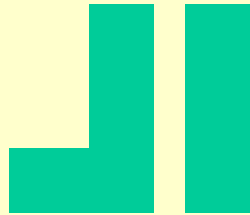
**The symbol, IL, on many Maya head glyphs
has always intrigued me. Could
it possibly have been a symbol for computing ancient math?**
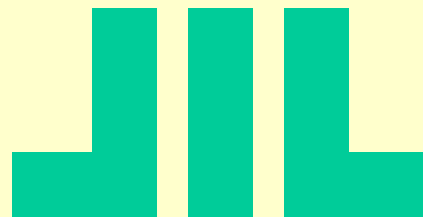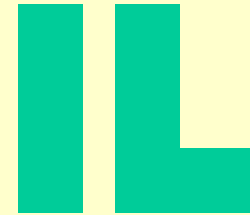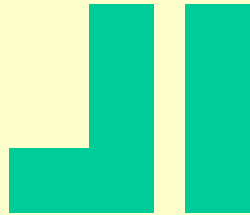
One possible meaning:
"Birth, commencement"

"The Maya did not use true fractions." ---Eric Thompson
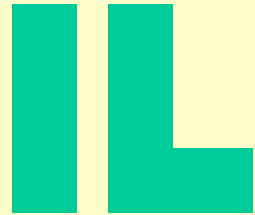
IX = Woman
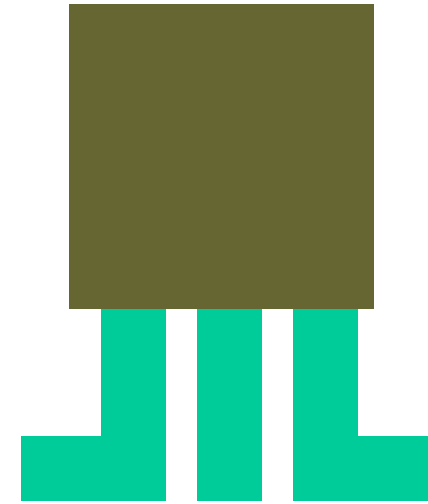
Sun's cords, beard

**One possible meaning:
"Birth, commencement"**

"Death Eyes", Expiration

Begin with a basic set of units & sub-units.

Basic Unitarity Template

Unit
1.0

%

%

%

Divide the Mantissa into Its Two Proportional Parts

The Mantissa and Its Complement to Unit 1.0

1.0	0.5 Mantissa
0.5 Mantissa	0.25

0.5 Mantissa Complement
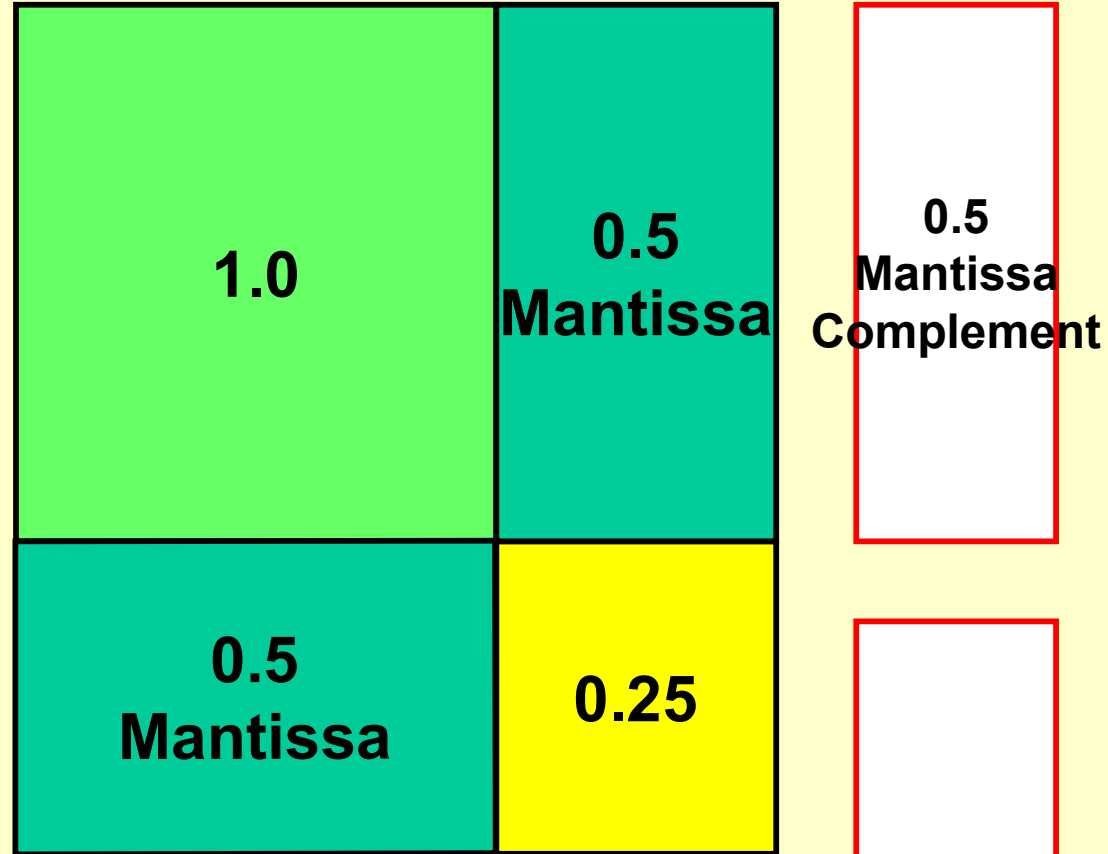
Think outside of the box of units

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0.5 Mantissa Complement

0.75

Baseline Units

1.0	0.5	0.5
0.5	0.25	0.75
0.5		
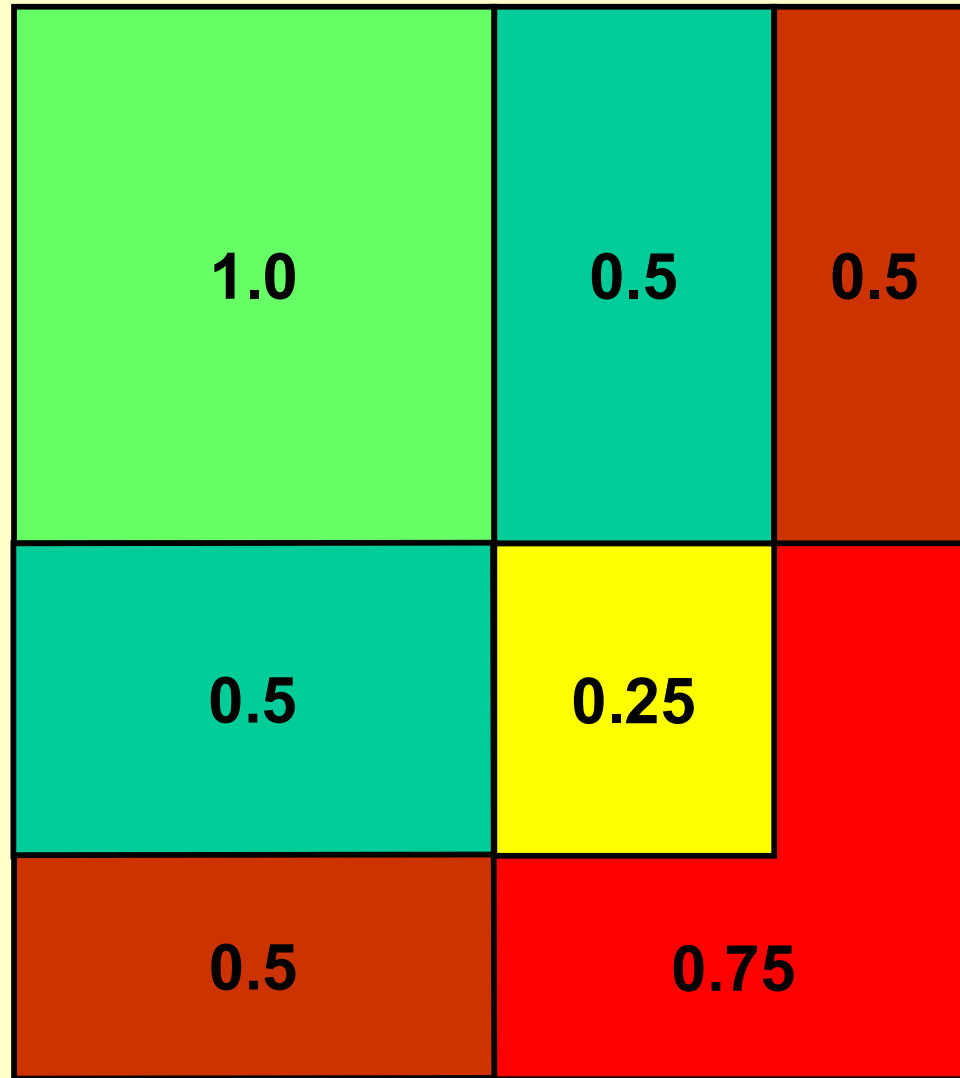
Assign Names to the Basic Units & Sub-Units

Significand

Anti-Significand

**Unit
1.0**

0.12345

0.87655

Significand

0.12345

**Significand
Square**

0.015239902

Anti-Significand

0.87655

Anti-Significand^2

0.984760097

The Anti-Significand^2
Complements the
Square of the
Significand to Form
Unit 1.0
0.12345 plus
0.87655
equals
1.0 unit

**or
Cornerstone Number**
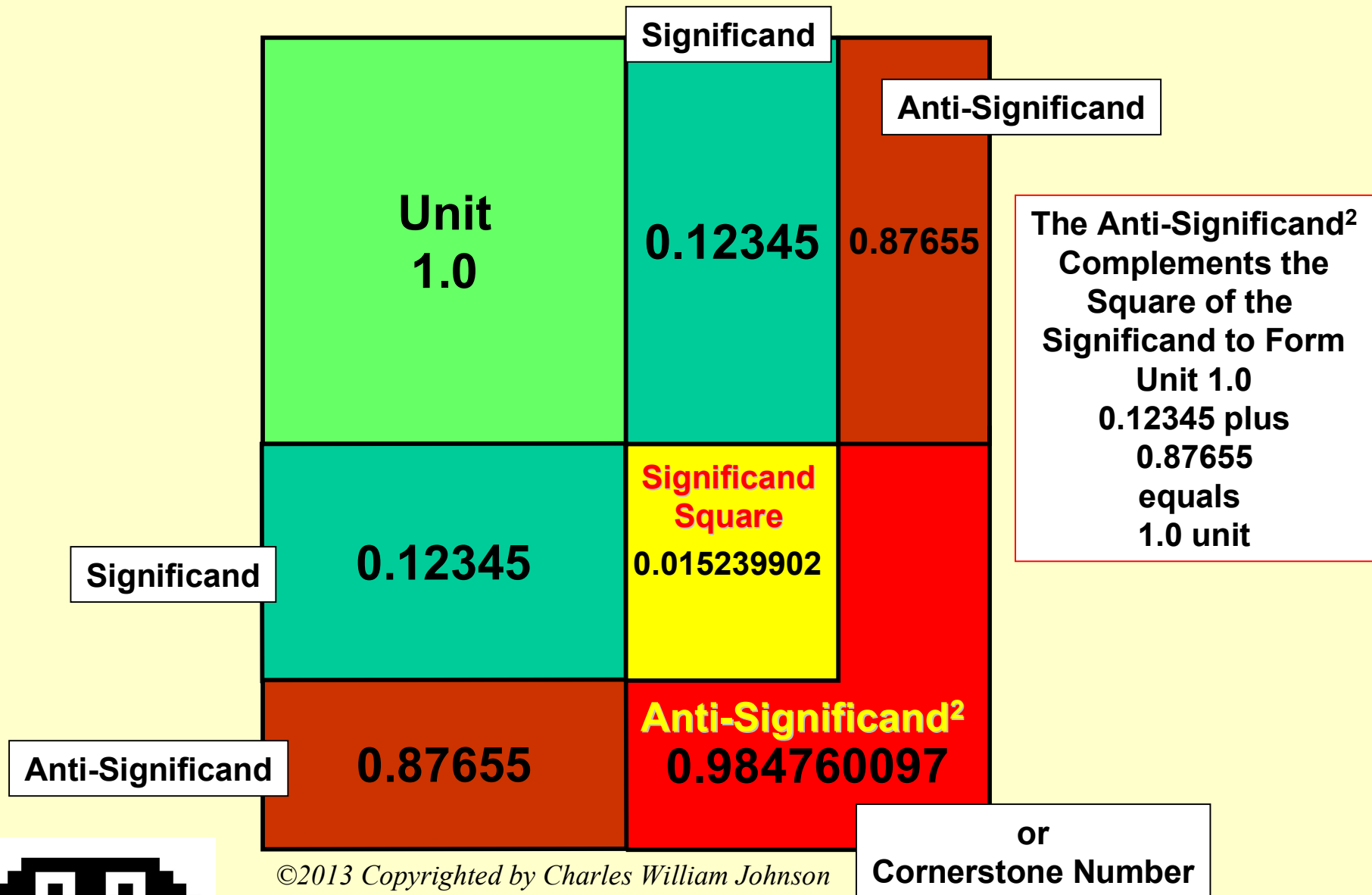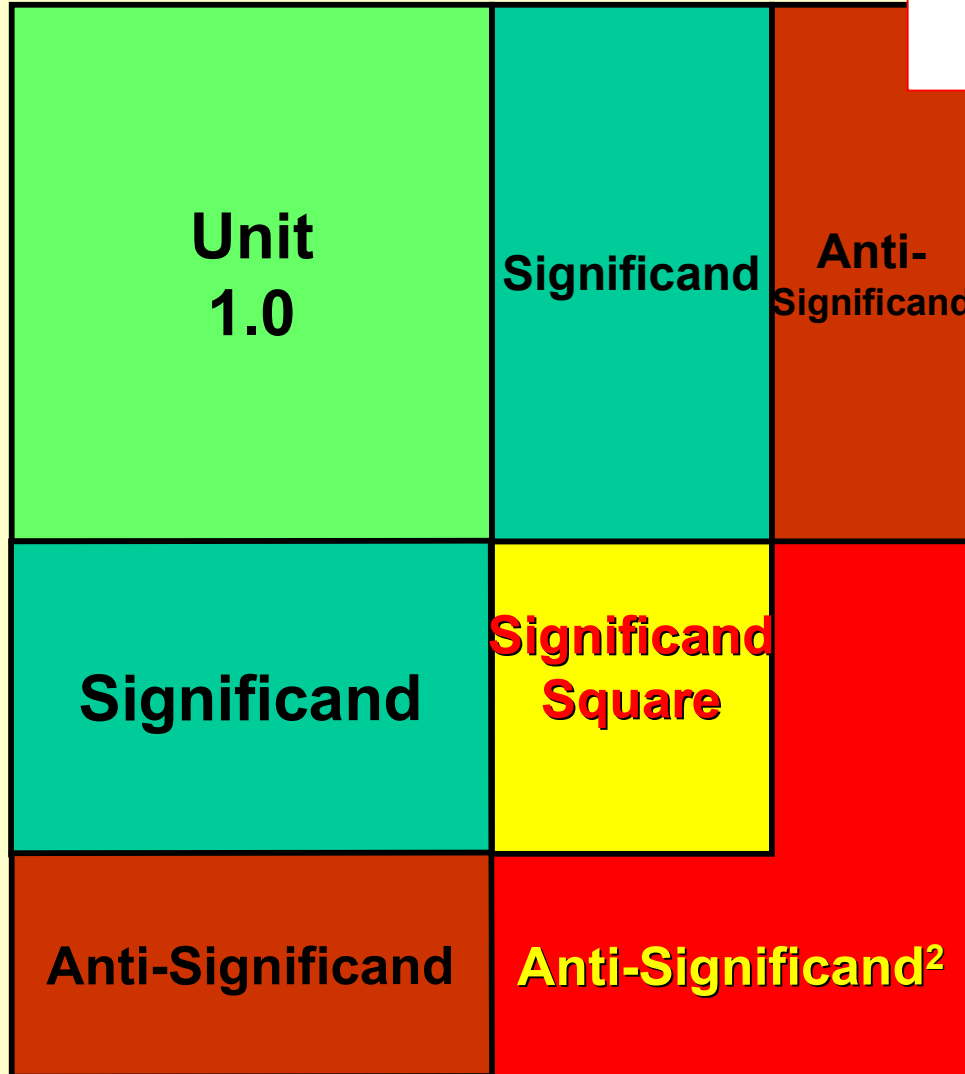
Baseline Units

$$1.0 - \text{Significand} = \text{Anti-Significand}$$

$$\text{Significand} \times \text{Significand} = \text{Significand}^2$$

$$1.0 - \text{Significand}^2 = \text{Anti-Significand}^2$$

Unit 1.0	Significand	Anti-Significand
Significand	Significand Square	
Anti-Significand	Anti-Significand^2	

**Significand-Square
plus
Anti-Significand-Square
equals
1.0 Unit**

Baseline Units

1.0	0.299792458	0.700207542
1.0	**0.299792458**	0.700207542
0.299792458	0.089875517 c^2	0.700207542
0.700207542	**0.910124482**	

0.700207542 halves to 1.78518499

Consider speed of light photon in a vacuum, **0.299792458** as the mantissa of a baseline number.

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~ Electron mass = 9.10938188

| 0.64 | 0.4 | 0.4 | 0.64 |
| 0.36 | 0.6 | 0.6 | 0.36 |

A Fourfold Design of the Basic Pattern

This design is similar to designs in many different ancient cultures.
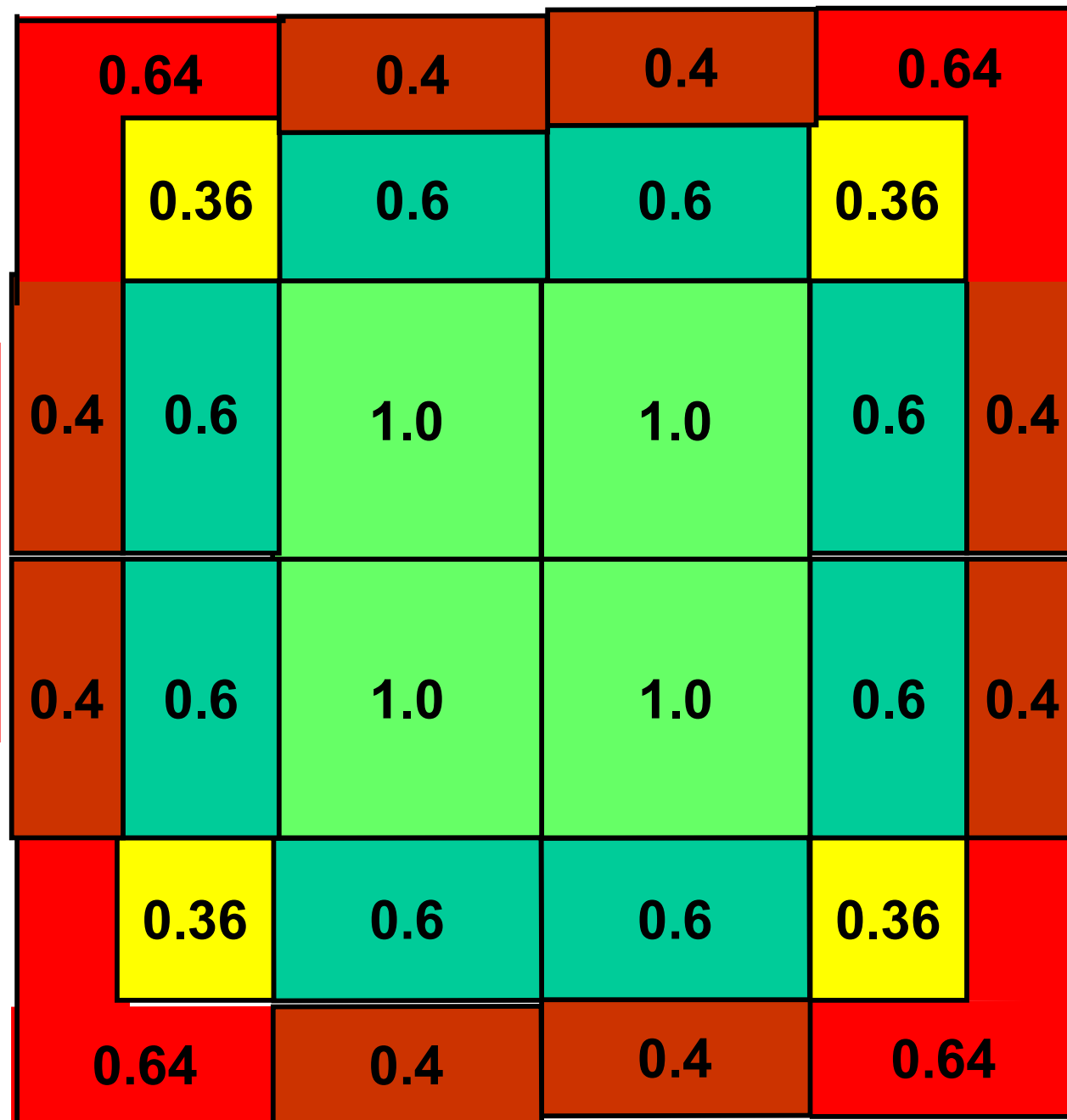
1.584 fractal
Random Maya Number
1584000

1.0	.584	.416
.584	.341056	
.416	.658944	

1.0
0.584
0.584
0.341056
0.416
0.416
0.658944
_____

4.0 Total

Significand: 0.584
Anti-Significand: 0.416

584c = Venus Synodic
416c = Maya/Aztec
(416, 208, 104, 52c)

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2.509056

1.490944

.658944

.416
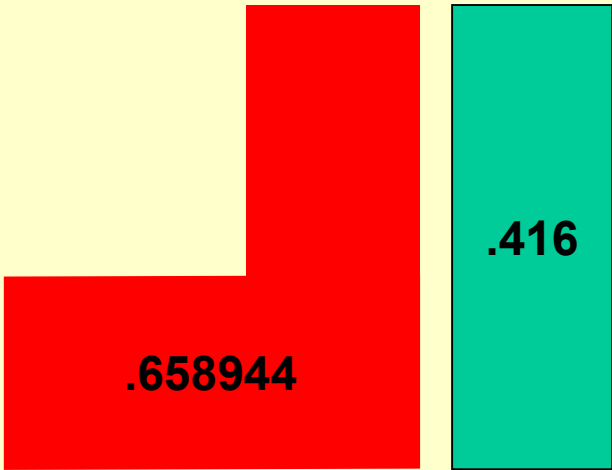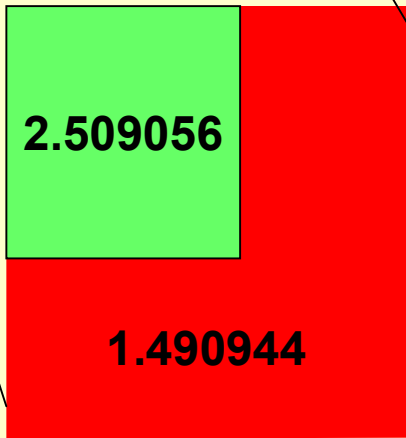
0.658944 / 0.416 = 1.584 fractal

1.872 fractal
Maya Long Count Period
1872000

Known Base Number | Unknown Cornerstone Number

1.0
0.872
0.872
0.760384
0.128
0.128
0.239616
_____
4.0 Total

Significand: 0.872
Anti-Significand: 0.128

Constant Number Series 128c
(8, 16, 32, 64, 128, 256, 512…)
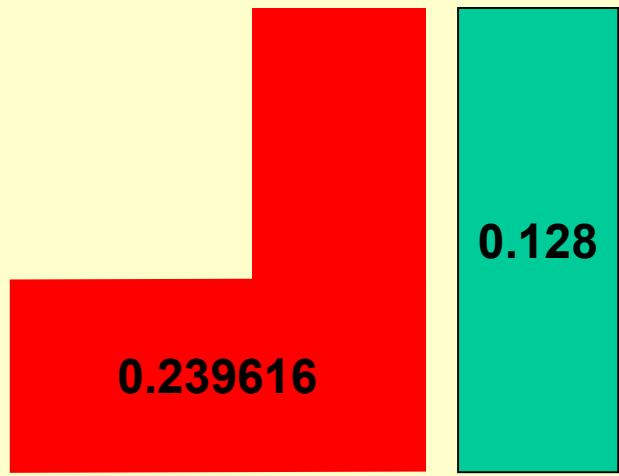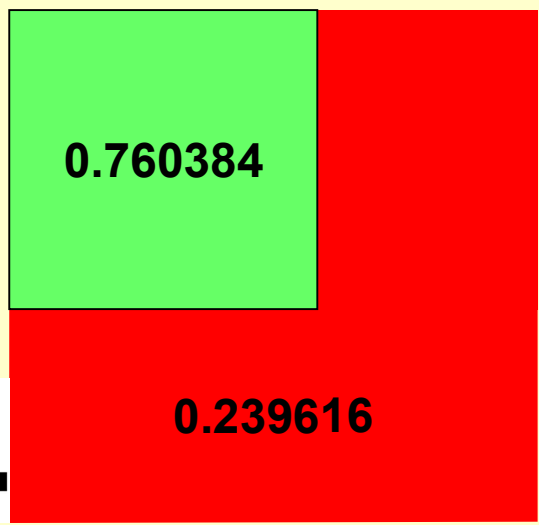
0.239616 / 0.128 = 1.872 fractal

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Basic Unitarity Template

Unit 1.0	**%**
%	**%**

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1872c Base Number

1872c Base Number

1.0	**.872**	**.128**
.872	**.760384**	
.128		**.239616**

Cornerstone Number

Basic Unitarity Template

Unit 1.0	**%**
%	**%**

	Significand	Anti-Significand
	1.0	.872	.128
Significand	.872		
Anti-Significand	.128	Cornerstone	

Significand

Anti-Significand

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1.872 fractal
Maya Long Count Period
1872000

1.0	.872	.128
.872	.760384	
.128	.239616	

How to compute the *cornerstone* number

Square the mantissa: 0.872 = 0.760384
Subtract product from 1.0 - 0.760384 = 0.239616
Area of cornerstone = 0.239616

In order to the base number, divide the cornerstone amount by the *anti-significand*:

0.239616 / 0.128 = 1.872

Computational steps:

0.872^2 = 0.760384
1.0 - 0.760384 = 0.239616
0.239616 / 0.128 = 1.872

Base fractal number: 1.872

Significand: 0.872

***Cornerstone* number: 0.239616**

***Anti-sgnificand*: 0.128**

Significand: 0.872
Anti-Significand: 0.128

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**1.36656 fractal
Maya Companion Number
1366560**

1.0	**.36656**	**.63344**
.36656	**.1343662336**	
.63344	**.865633766**	

$0.36656^2 = 0.1343662336$
$1.0 - 0.1343662336 = 0.865633766$
$1.0 - 0.36656 = 0.63344$

$0.865633766 / 0.63344 = 1.36656$

1.36890 Sidereal Earth reciprocal (365.256)
- 1.366560 Maya companion number
_____
0.00234, 468, 936, 1872 Maya Long Count Period Fractal

1 / 1.36890 = 0.730513551 /2 = 0.365256775

Base fractal number: 1.36656

Significand: 0.36656

Cornerstone **number: 0.865633766**

***Anti-sgnificand*: 0.63344**

**Significand: 0.366560
Anti-Significand: 0.633440**

1.36656 fractal
Maya Companion Number
1366560

1.0	**.36656**	**.63344**
.36656	**.1343662336**	
.63344	**.865633766**	

Companion Number divided by *Anti-Significand*

1366560 / 63344 = 21.5736297

21.5736297 times 0.865633766 = 18.67486233

136656 squared = 18674862340 confirmed

Base fractal number: 1.36656

Significand: 0.36656

***Cornerstone* number: 0.865633766**

***Anti-sgnificand*: 0.63344**

Significand: 0.366560
Anti-Significand: 0.633440

1.36656 fractal
Maya Companion Number
1366560

0.872	-	1.0	=	0.128
Significand		Unit		Anti-Significand

Companion Number : *Anti-Significand*

1.872 - 2.0 = 0.128 Bar

1.872 x 0.128 = 0.239616 Cornerstone

1.872 / 0.128 = 14.625

14.625 x 0.239616 = 3.504384 Total Area

1.872 squared = 3.504384 Total Area

360	-	302.4	=	57.6
Degrees		Kemi	=	Maya
Circle		Anti-Radian	=	Radian

1.6272631 fractal
Proton Mass Value

1.0	**.6272631**	**.3727369**
.6272631	**.393458996**	
.3727369	**.606541003**	

$$0.6272631^2 = 0.393458996$$
$$1.0 - 0.393458996 = 0.606541003$$
$$1.0 - 0.6272631 = 0.3727369$$

$$0.606541003 / 0.3727369 = 1.6272631$$

How to derive proton mass from its mantissa.
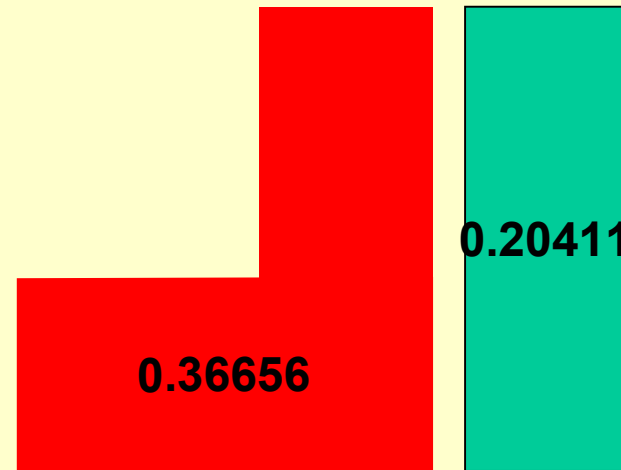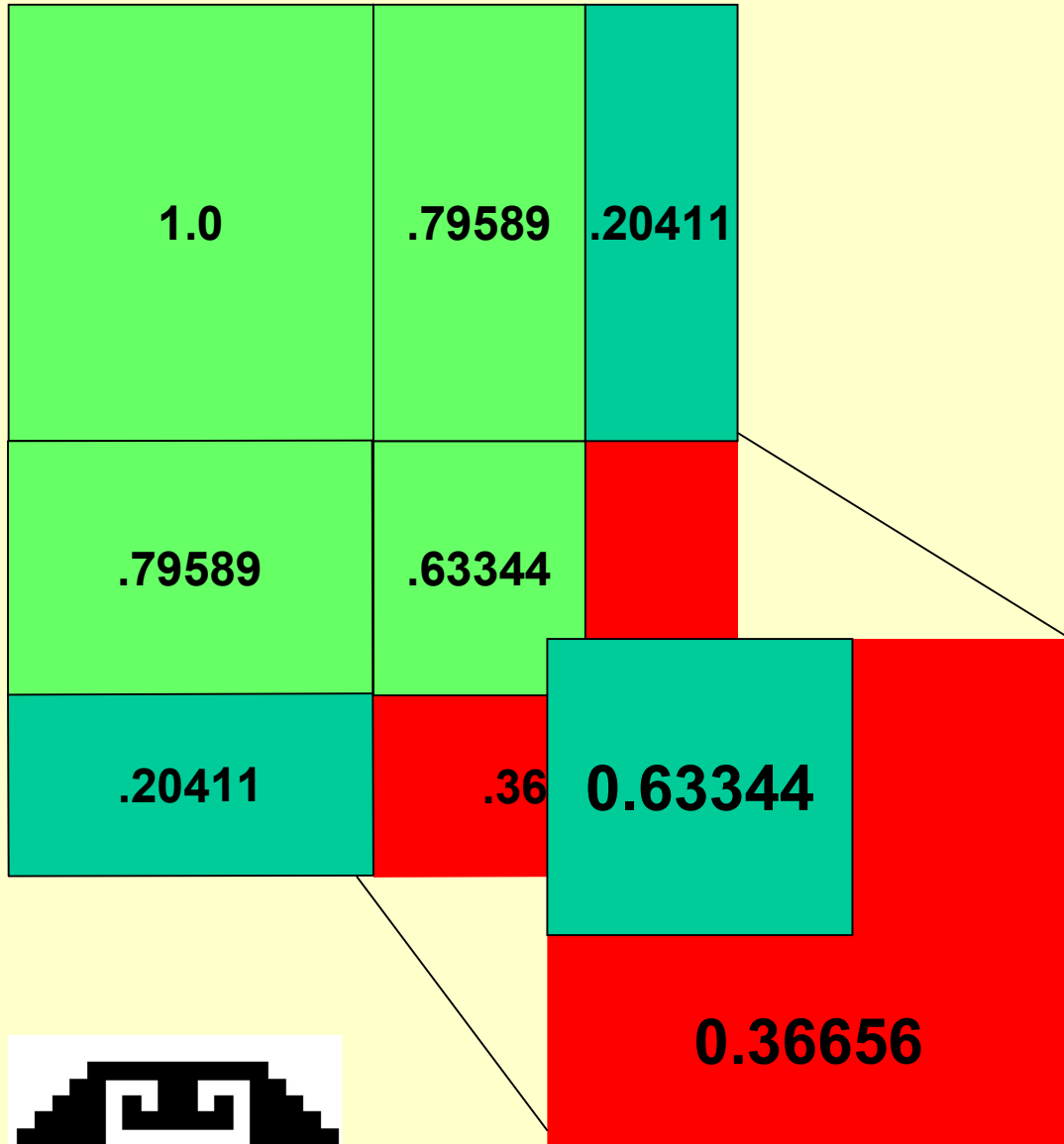
$$0.606541003 / 0.3727369 = 1.6272631$$

Base fractal number: 1.6272631

Significand: 0.6272631

***Cornerstone* number: 0.606541003**

***Anti-sgnificand*: 0.3727369**

Significand: 0.6272631
Anti-Significand: 0.3727369

1.79589 fractal Inverse Number of Cornerstone 0.366560

| 1.0	.79589	.20411
.79589	.63344	
.20411	.36	

0.36656

0.20411

0.63344

0.36656

0.36656 / 0.20411 = 1.79589… fractal

**Significand: 0.79589
Anti-Significand: 0.20411**

Cornerstone: 0.36656

1.929163064 fractal Inverse Number of Cornerstone 0.1366560

Significand: 0.929163064
Anti-Significand: 0.070836935

Cornerstone: 0.136656

|		
1.0	.929163064	.070836935
.929163064	.863344	.136656
.070836935	.136656	

0.070836935
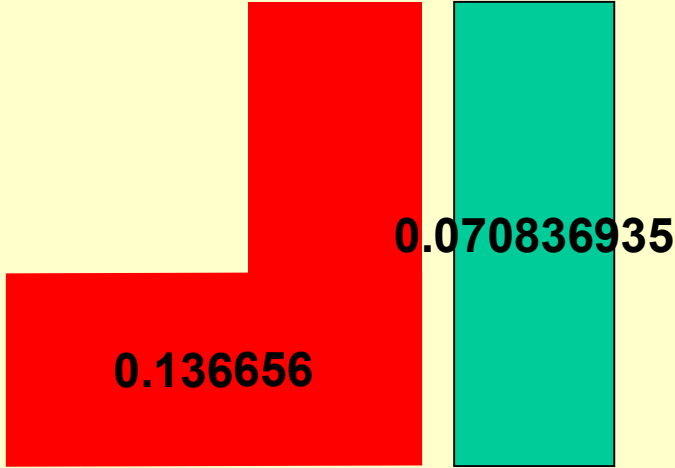
0.136656

0.136656 / 0.070836935 = 1.929163064 fractal

Divide Cornerstone by Anti-Significand in order to obtain the Base Number

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Unknown Base Number: **1.89668545** fractal Inverse Number of
Known Cornerstone 0.1959552

Significand: 0.89668545
Anti-Significand: 0.103314547

Cornerstone: 0.1959552

1.0   .89668545
                .0.103314547

.896685452   .80

0.8040448

.103314547

0.1959552

0.103314547
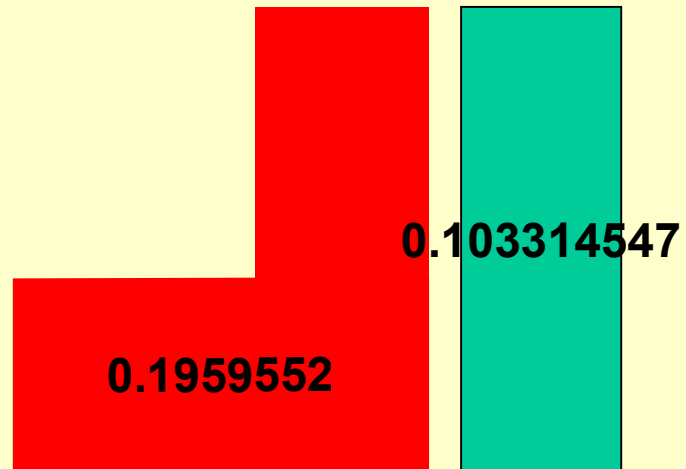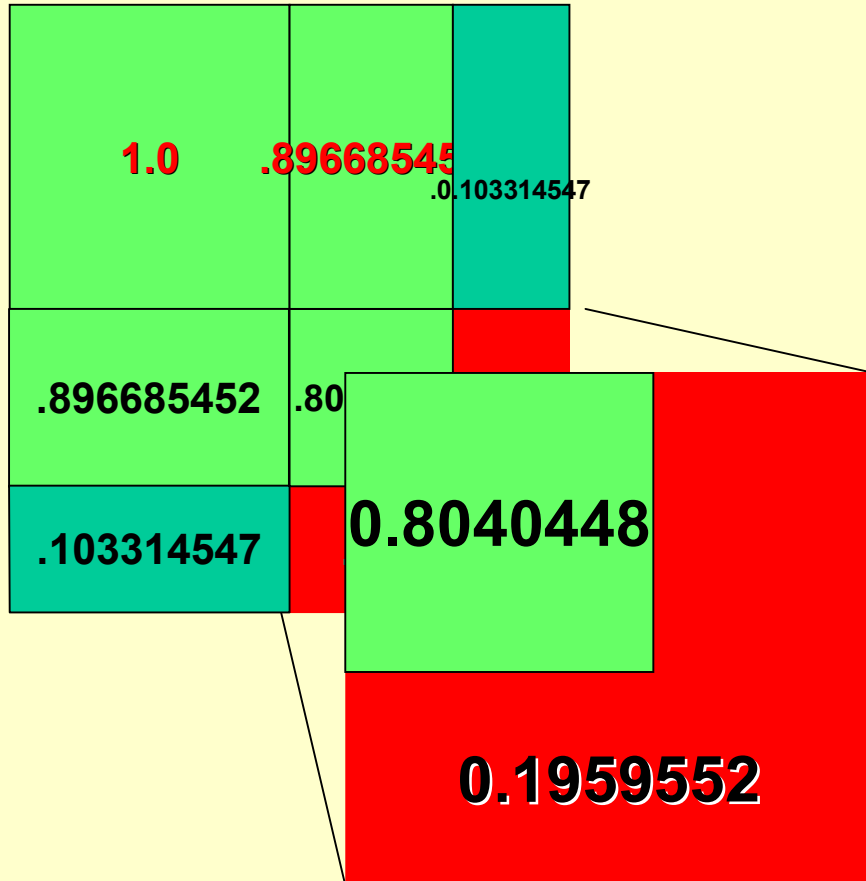
0.1959552

1.0 - 0.**1959552** = 0.8040448
Square root of 0.8040448 = 0.89668545
1.0 + 0.89668545 = **1.89668545**

One Method to Obtain Base Number
Various Methods Exist

Known Base Number: **1.959552** fractal
Inverse Number of
Unknown Cornerstone: 0.079259959

Significand: 0.959552
Anti-Significand: 0.040448

Cornerstone: 0.079259959

1.0	.959552	.0.040448
.959552	.9207...	
.040448	.07...	

0.92074004

0.079259959

0.040448
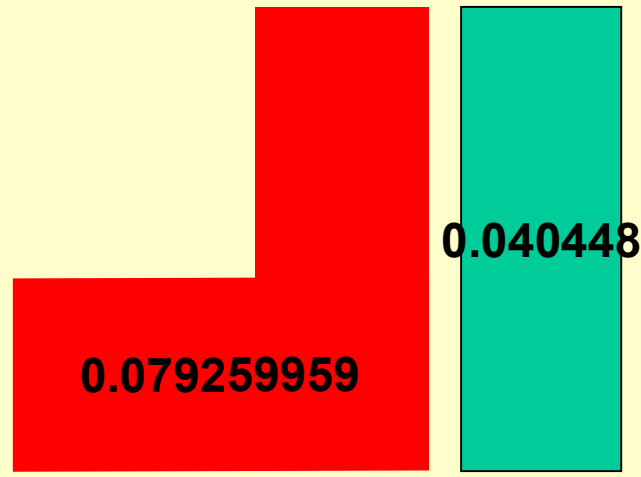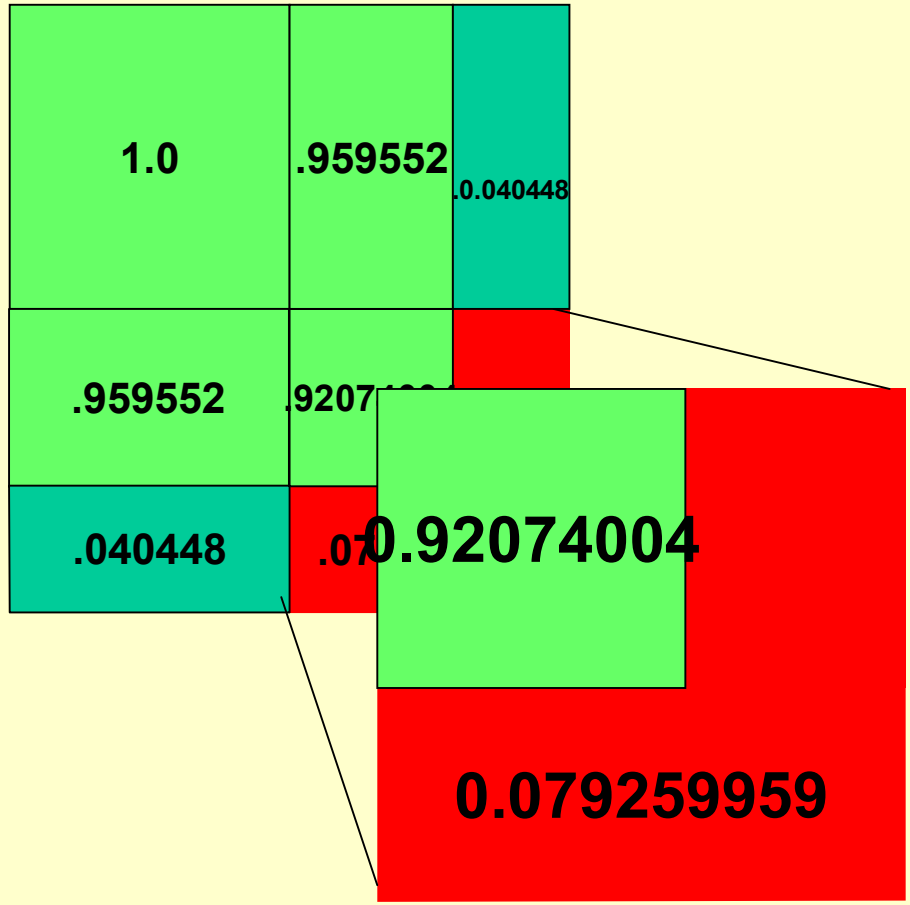
0.079259959

**0.7926 halves to 755.88 fractal of
wall of Great Pyramid of Giza**

0.079259959 / 0.040448 = 1.959552 fractal

**Divide Cornerstone by Anti-Significand
in order to obtain the Base Number**
1.959552

First Radiation Constant: Base Number 3.741736091

0.449827571 / 0.258263909 = 1.741736091
+ 2.0
_____
3.741736091

1.0	2.0	3.0	.741736091 .25826309
2.0	2.0	3.0	.741736091 **.25826309**
3.0	3.0	3.0	.741736091 .25826309
.741736091	.741736091	.741736091	.550172
.25826309	.25826309	.25826309	.449827571

Cornerstone divided by anti-significand equals fractal expression of base number.

The Square Root of Five: 2.236067977

1.0	2.0	.236067977	.763932023
2.0	2.0	.236067977	.763932023
.236067977	.236067977	.05572809	
.763932023	.763932023	.94427191	

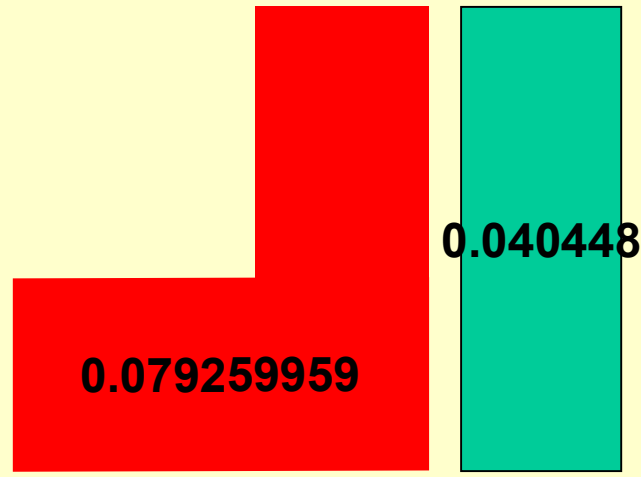**In this case, four significand numbers equal the cornerstone value.**
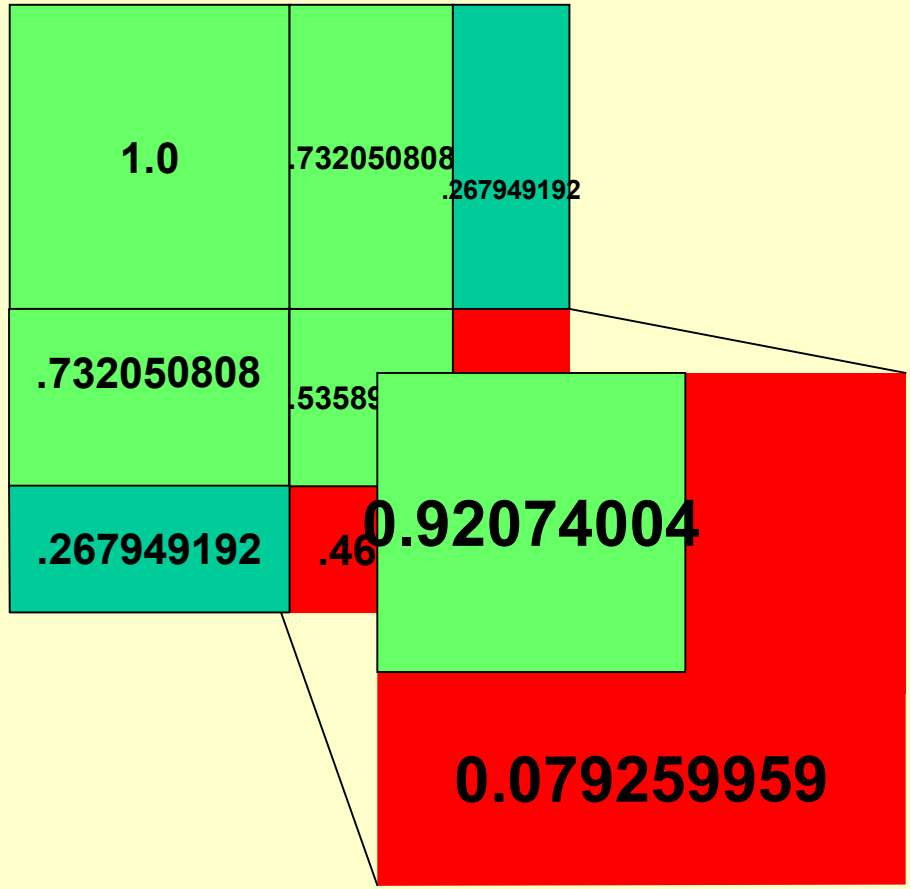
4 x .236067977 = .94427188

Known Base Number: **1.732050808** fractal
Square Root of Three | Inverse Number of
Unknown Cornerstone: 0.464101614

Significand: 0.732050808
Anti-Significand: 0.267949192

Cornerstone: 0.464101614

1.0

.732050808

.267949192

.732050808

.53589

.267949192

.46

0.92074004

0.079259959

0.040448

0.079259959

0.7926 halves to 755.88 fractal of
wall of Great Pyramid of Giza

Alternate Method to Derive Cornerstone
Anti-Significand times Base Number
0.267949192 x 1.732050808 = 0.464101614

Significand divided by 2x Anti-Significand
yields reciprocal of Significand
.732050808 / .535898385 = 1.366025401
1 / .732050808 = 1.366025404

The Square Root of Three as an Ideal Temperature Scale

Square root of Three divided by Cornerstone Equals the Boiling Point of Water
1.732050808 / .464101614 = 373.2050808 fractal
Base Number divided by Cornerstone equals BPW

Significand divided by Anti-Significand Equals Freezing Point of Water
.732050808 / .267949192 = 273.2050808 fractal
Significand divided by Anti-Significand Equals FPW

Square Root of Three divided by 2x Anti-Significand Equals Midpoint of BPW-FPW
1.732050808 / .535898385 = 323.2050808
Base Number divided by 2x Anti-Significand equals Midpoint BPW-FPW

Earth/matriX
SCIENCE IN ANCIENT ARTWORK