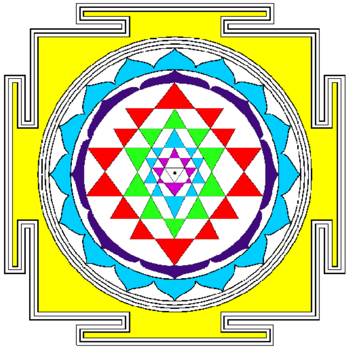
Sri Yantra

Mysticism East and West

Stephen M Phillips

http://smphillips.mysite.com/the-sri-yantra.html

Sri Yantra

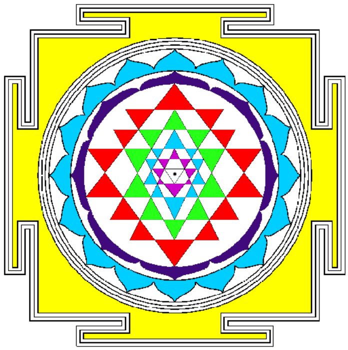


- The Sri Yantra is revered by Hindus as the most powerful and sacred of the yantras, or images for meditation. It represents the process of unfolding of Divine Creation from the Absolute, which is symbolized by the point, or so-called "bindu," at its centre (this is called "Sarva Anandamaya").
- Five downward-pointing triangles symbolizing the feminine creative energy, or Shakti, intersect four upward-pointing triangles symbolizing the masculine creative energy, or Shiva.
- This generates 42 triangles arranged (in the pyramidal form called "Meru" in India) in layers or rings of eight, ten, ten & 14 triangles. The set of eight triangles is called "Sarva Rogahara," the first set of ten triangles is called "Sarva Rakshakara," the second set of ten triangles has the name "Sarvarthasadhaka" and the set of 14 triangles is named "Sarva Saubhagyadayaka."

Sri Yantra

- They surround a downward-pointing, central triangle called "**Sarva Siddhiprada**," whose corners denote the triple Godhead, or trimûrti, of Shiva, Brahma & Vishnu.
- Eight lotus petals, called "Sarva Samkshobahana," are symmetrically arranged in a circumscribing circle and 16 lotus petals, named "Sarvasa Paripuraka," are likewise arranged in a larger circle. Surrounding the triangles and petals are three circles equally spaced apart. They are enclosed in a square with "doorways" in the middle of each side. There are plane, pyramidal and spherical forms of the Sri Yantra. In India there are even temples with its architecture. The Vidyashankara temple at Sringeri in India claims to possess the oldest known form of the Sri Yantra.
- An excellent website devoted to the Sri Yantra is http://sriyantraresearch.com/index.htm. It sells computer software for drawing and colouring this sacred geometry.

How to Construct a Sri Yantra



- 1. Draw a circle and a vertical straight line that is its diameter.
- 2. Mark out 48 equal sized parts in the diameter.
- 3. Mark off the 6th, 12th, 17th, 20th, 23rd, 27th, 30th, 36th & 42nd divisions. Draw chords through these marked-off points at right angles to the diameter and label them 1-9.
- 4. At each end of a chord, rub off 1/16th of chord no. 1, 5/48ths of chord no. 2, 1/3rd of chord no. 4, 3/8ths of chord no. 5, 1/3rd of chord no. 6, 1/12th of chord no. 8 & 1/16th of chord no. 9.
- 5. Draw triangles with shortened chord nos. 1, 2, 4, 5, 6, 8 & 9 as bases and the middle points of nos. 6, 9, 8, 7, 2, 1 & 3 respectively as their apices.
- 6. Draw two triangles with nos. 3 & 7 as their bases and the lower and the upper ends of the diameter as their respective apices.
- 7. Place the bindu at the middle of the central triangle.
- 8. Mark off 16 equidistant points on the circumference of the circle, starting from the top end of the vertical diameter, and construct 8 petals of the lotus around the circumference.
- 9. Circumscribe a circle touching the outer extremity of the petals. Divide the circumference of this circle into 32 equal divisions and draw symmetrically sixteen petals over them, as before.
- 10. Circumscribe a circle touching the extremity of the 16 petals. Enclose this circle with two concentric circles so that the middle one is the same distance apart from the two others.
- 11. Draw three squares enclosing the outermost circle, equidistant from one another and the innermost one not touching the outer circle. Mark off four doorways in the middle of the sides of the square.
- (Warning: the construction of the Sri Yantra is very unforgiving towards small errors. Lines need to be drawn as accurately as possible, otherwise they will not intersect at a common point to create corners of triangles). See an animation of this construction here.

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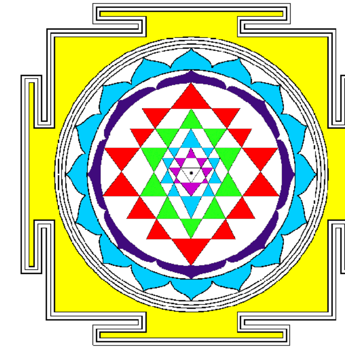

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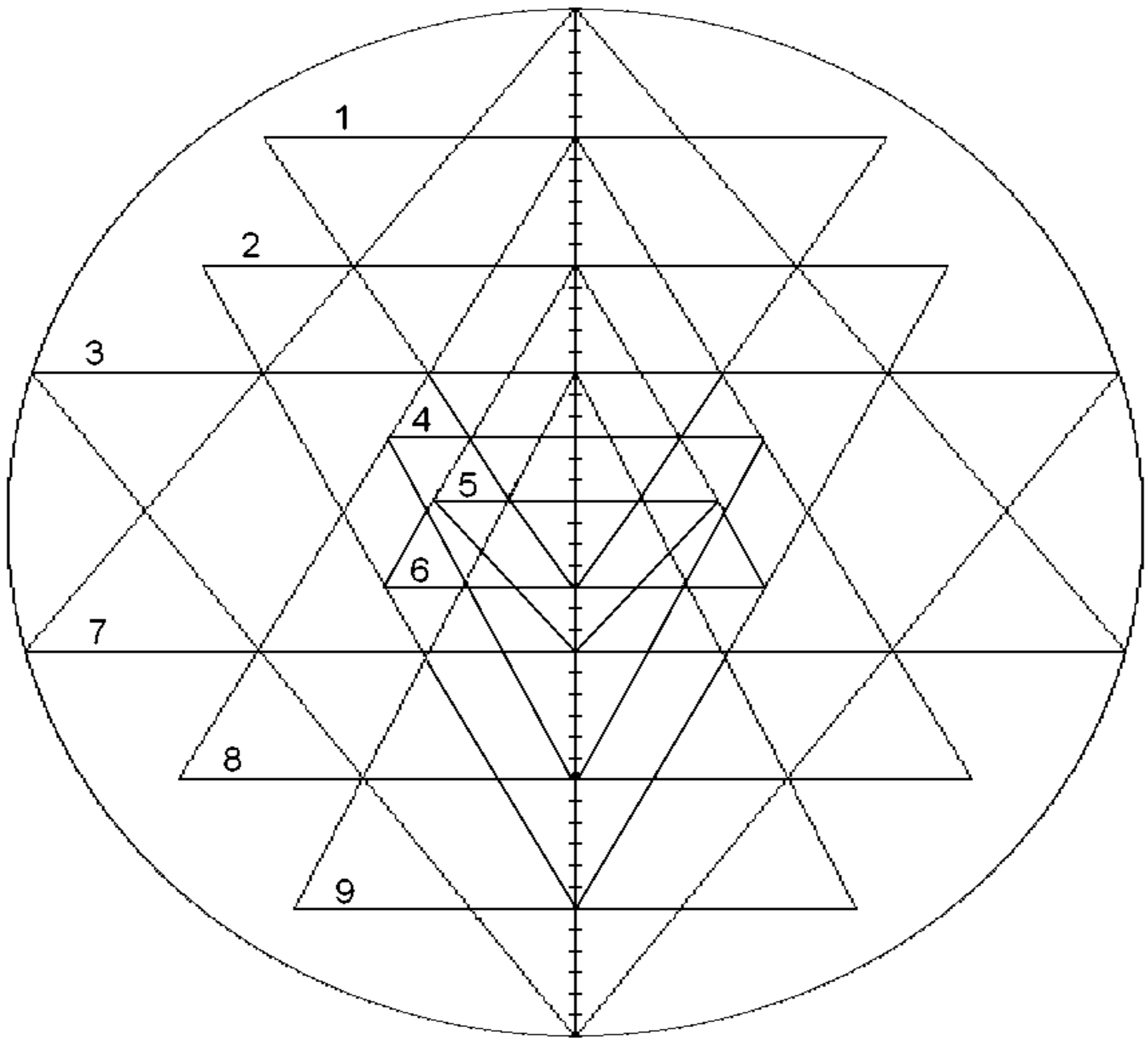

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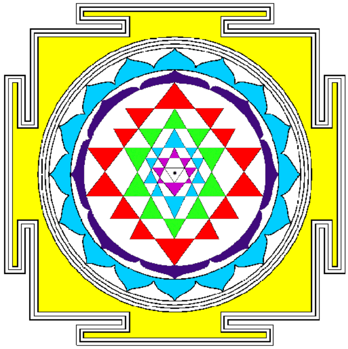

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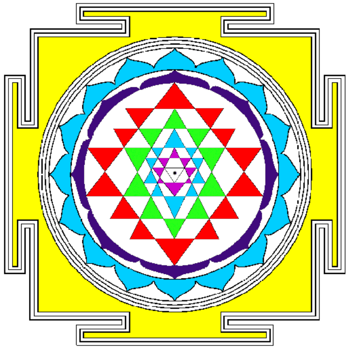
The division of the vertical diameter into 48 equal segments is highly significant, for this number is one of the defining parameters of holistic systems, e.g., the 48 points, lines & triangles making up the outer Tree of Life and the 48 corners of the seven separate polygons making up each half of the inner Tree of Life. The table of the gematria number values of the Sephiroth, their Godnames, et al indicates that it is the number value of Kokab, the Kabbalistic name of the Mundane Chakra of Hod. Its astrological association is the planet Mercury.

How to Construct a Sri Yantra



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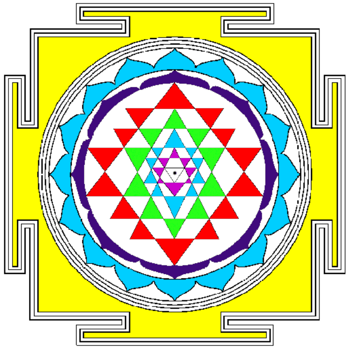
https://www.youtube.com/watch?v=KLxPUoaBjQ8



How to Construct a Sri Yantra

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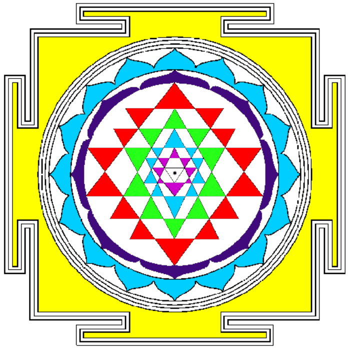
The Sri Yantra is generated by the overlapping of five downward-pointing triangles (shown in blue) and four upward-pointing triangles (shown in red). According to Tantra, creation on every level and scale is the product of the union of the opposite polarities of the male and female principles. In Hinduism, these archetypes are embodied in the God Shiva and the Goddess Shakti. For this reason, the downward-pointing triangles are called "Shakti triangles" and the upward-pointing triangles are called "Shiva triangles." Notice that the nine triangles consist of four pairs of Shiva & Shakti triangles, two pairs of which are mirror images of each other, and an extra Shakti triangle that is unpaired. The lowest corner of this triangle is directly below the lowest corner of the central triangle enclosing the bindu (black dot). The latter corner is the only corner of the central triangle that is not also a corner of one of the 42 triangles that surround the bindu in the 2-dimensional Sri Yantra.

How to Construct a Sri Yantra



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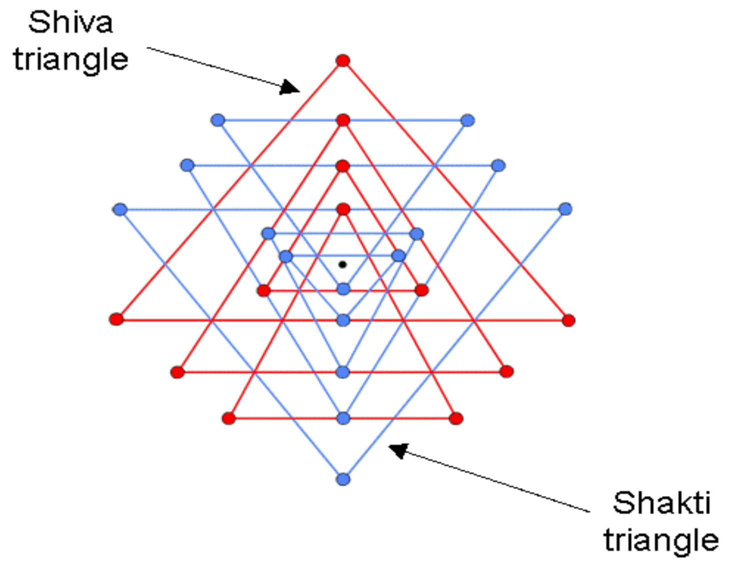
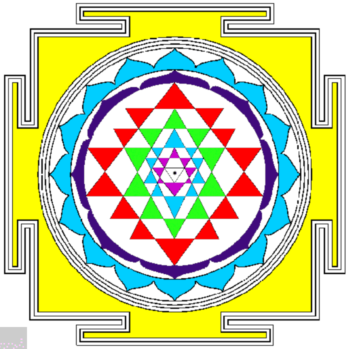


The Sri Yantra consists of five downward-pointing (Shakti) triangles and four upward-pointing (Shiva) triangles

How to Construct a Sri Yantra



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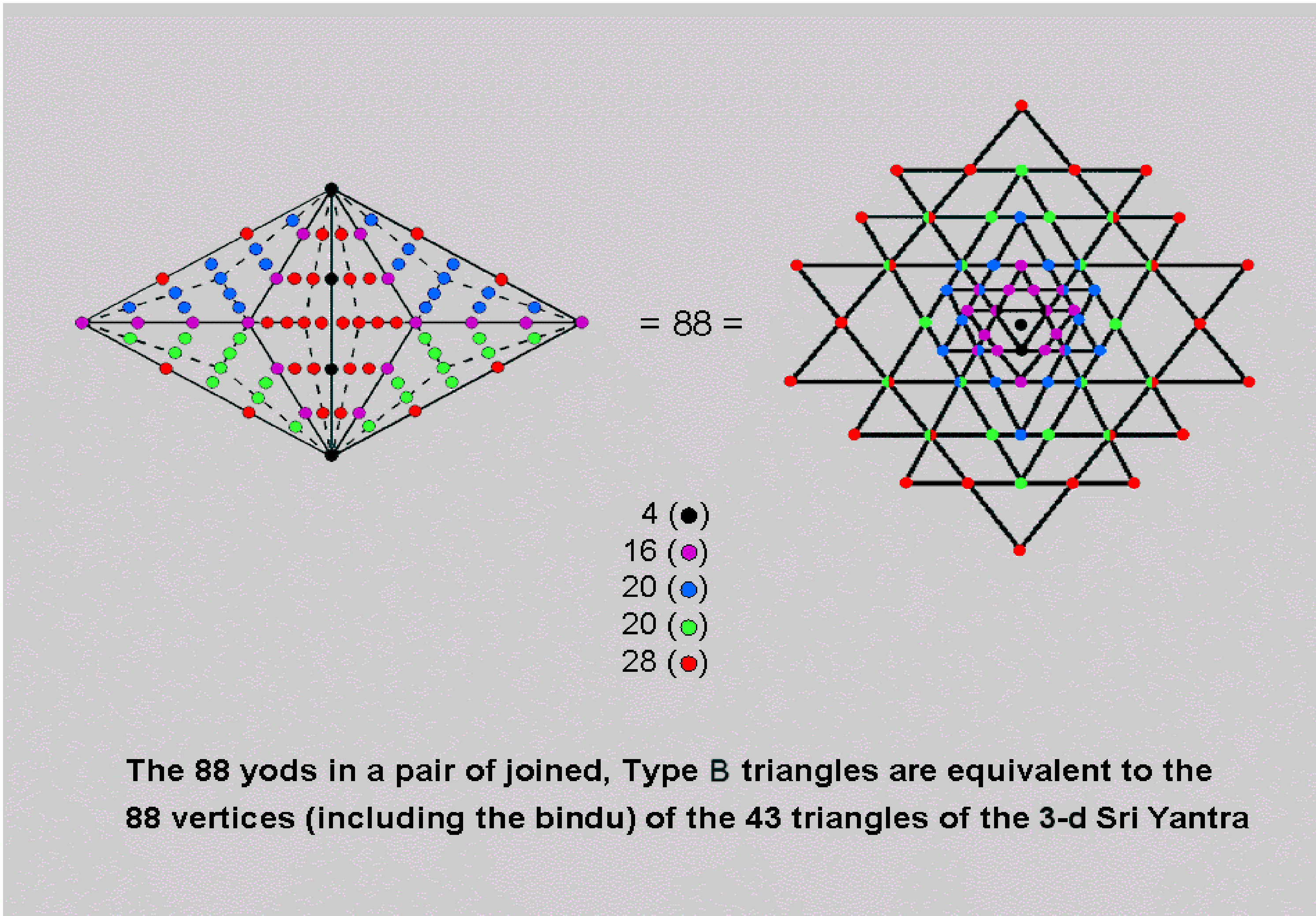

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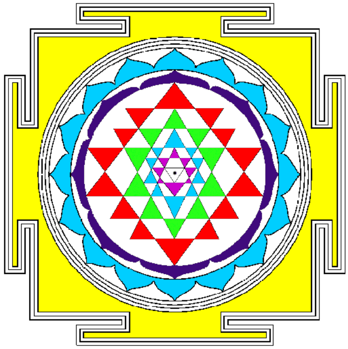

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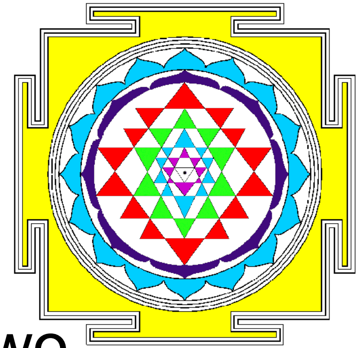
The 43 triangles of the 3-dimensional Sri Yantra have 87 corners. 87 is the number value of Levanah, the Mundane Chakra of Yesod. Four black yods consist of the bindu and the three corners of the central triangle, 16 violet yods are corners of the first layer of eight triangles, 20 blue yods are corners of the second layer of ten triangles, 20 green yods are corners of the third layer of ten triangles and 28 red yods are corners of the fourth layer of 14 triangles.

A Type B triangle has 46 yods. Two Type B triangles joined at one side have 88 yods. They comprise four black yods on the shared side, 16 violet yods on the six internal sides of Type A triangles, 20 blue yods in a pair of Type A triangles, 20 green yods in two more Type A triangles and 28 red yods inside the two remaining Type A triangles and on external sides of the two Type B triangles

How to Construct a Sri Yantra



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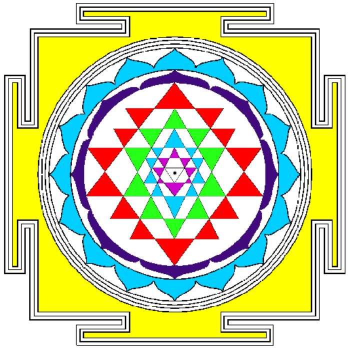
The power of the tetractys is such that it can transform two joined triangles into an object that is equivalent to the famous Sri Yantra! Here is how the simplest triangle is revealed by its construction from tetractyses to be equivalent to half the Sri Yantra. The latter cannot, of course, be split into two halves that are exact mirror images of each other, unlike the yods in the two joined, Type B triangles in the inner Tree of Life. However, the isomorphism between the Sri Yantra and these triangles as outlined above is established through a one-to-one correspondence between yods and corners. It is unnecessary to this isomorphism that one sacred geometry should exhibit the same mirror symmetry as the other one.

The human diploid number is 46, i.e., a male or female cell contains 46 chromosomes. There are also 46 bones in the human axial skeleton that exist as pairs in the left-hand and right-hand sides of the body

How to Construct a Sri Yantra



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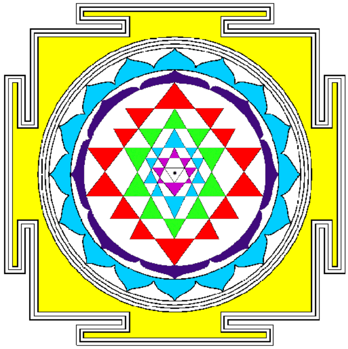
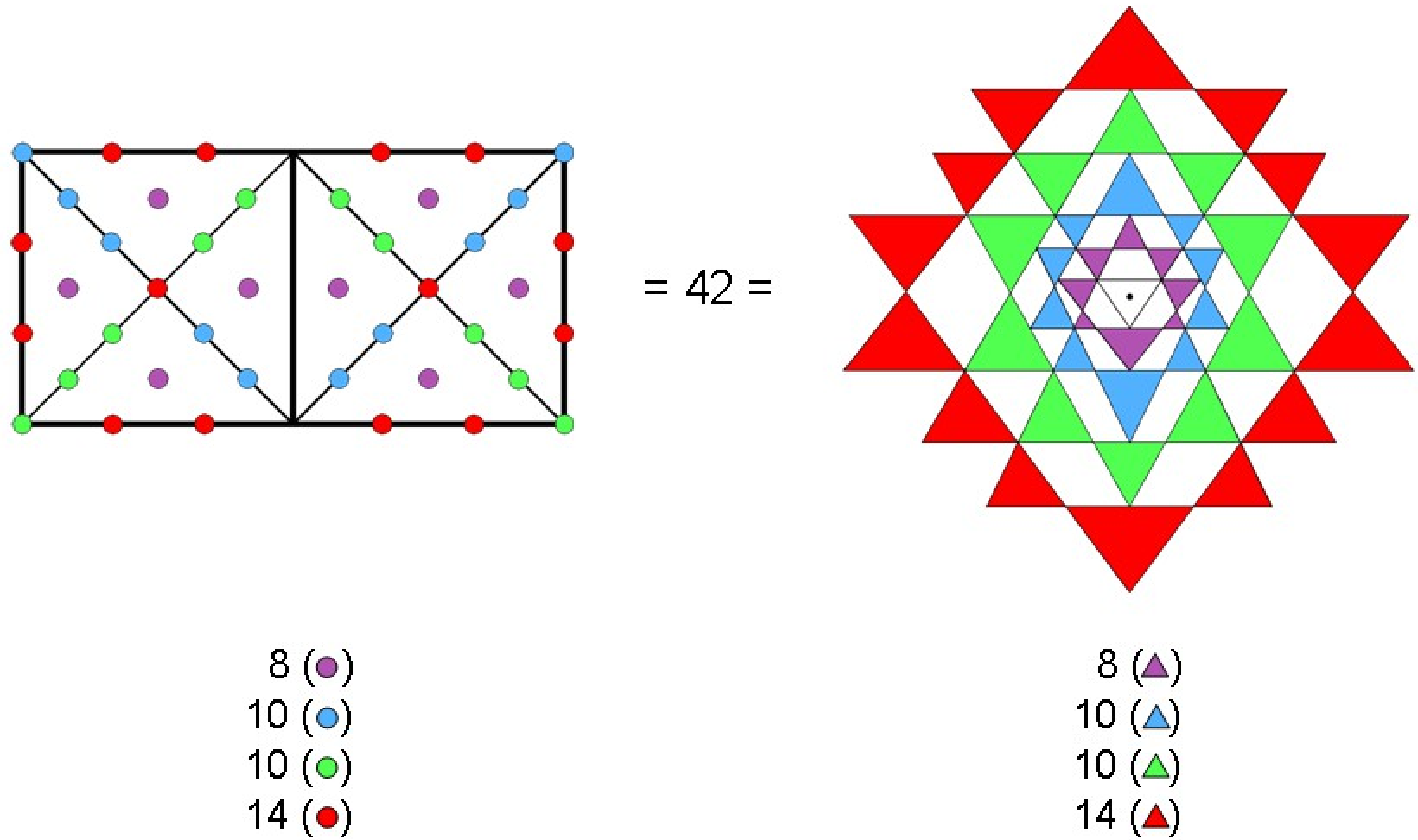
A pair of joined squares is analogous to the Sri Yantra. The 21 yods outside their shared side in the four tetractyses of each square correspond to the 21 triangles in each half of the Sri Yantra.

That this is not mere coincidence is indicated by the fact that four classes of yods can be identified whose numbers are the numbers of triangles in the four layers of the Sri Yantra. This identification is unique in that no other choices of yods are possible that preserve the mirror symmetry of their distribution with respect to the root edge as mirror.

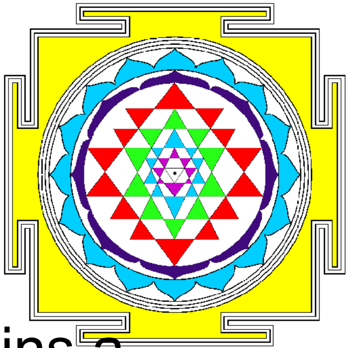
The four yods on the root edge are to be associated with the pair of joined triangles rather than with the pair of squares, for both types of joined polygons are members of the two sets of seven enfolded polygons of the inner Tree of Life.

How to Construct a Sri Yantra





How the Golden Ratio Determines the Construction of the Sri Yantra



Artists and architects have know for a long time (how long remains a matter of controversy) that a certain rectangle has a particularly attractive appearance. It is know as the "**Golden Rectangle**." If the shorter side has length 1 in any unit of size, the longer side of this rectangle has the length **$\Phi = (\sqrt{5}+1)/2$**, where Φ =1.6180339887498948482... is called the "**Golden Ratio**."

A square drawn in the Golden Rectangle with its shorter side as one side divides its longer side in the proportion 1:($\Phi-1$). What is remarkable about this particular rectangle is that this ratio is equal to Φ. Any line segment divided according to this proportion is called the "**Golden Section**." Many books have been written about the role played by this number in nature and in human culture. The book by Dr Scott Olsen entitled "**The Golden Section — Nature's Greatest Secret**" is especially recommended. It will be now shown how Φ, the "**divine proportion**," determines the form of the Sri Yantra

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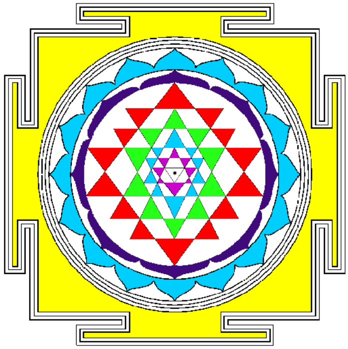
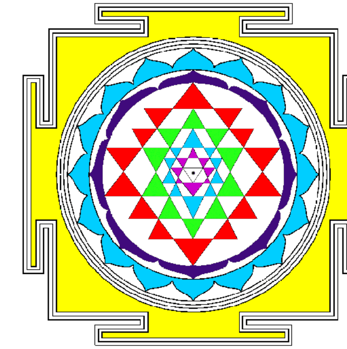


Starting with a corner of the square within the Golden Rectangle, draw a circle of radius Φ (the black-dashed line on the left below). Extend upwards a vertical side of the square until it intersects the circle (denoted by one of the green dots).

As Φ2 – 1 = Φ, Pythagoras' theorem tells us that the length of the third side of the right-angled triangle with a base length of 1 and a hypotenuse of length Φ is √Φ (see below).

The angle θ between the base and hypotenuse is 51°49′38″. Now draw a pink circle of radius √Φ with its centre at the right-angled corner of the triangle. The animation demonstrates how a Sri Yantra circumscribed by this circle can be constructed from the Golden Section.

How the Golden Ratio Determines the Construction of the Sri Yantra



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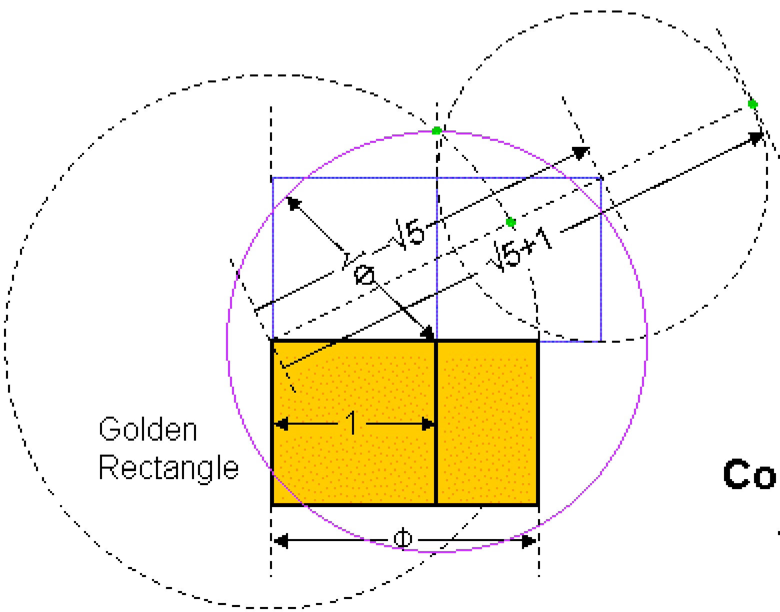
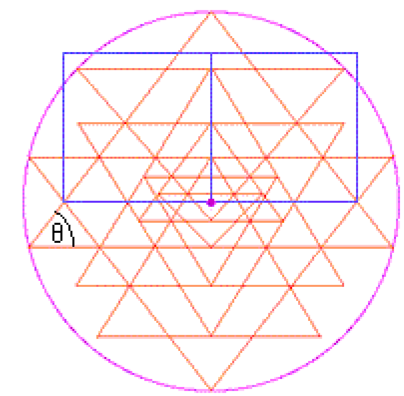


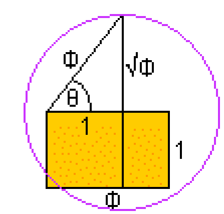
$\Phi/1 = 1/(\Phi - 1)$

$\Phi^2 - 1 = \Phi$

Radius of circle circumscribing Sri Yantra = $\sqrt{\Phi}$



Construction of the Sri Yantra from the Golden Section



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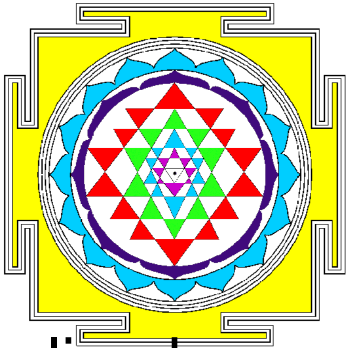
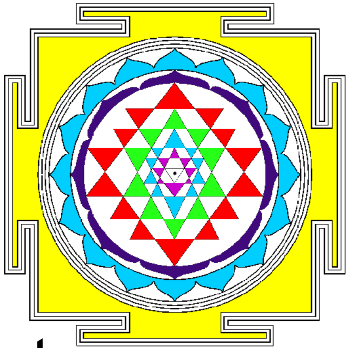


The sides of the two largest triangles in the Sri Yantra are inclined to their horizontal bases by the angle θ. It is amazing that the faces of the Great Pyramid of Khufu are inclined to the horizontal by an angle of 51°50′40″ (see here), which differs from θ by only about one minute of arc!

Because they have no evidence that the ancient Egyptians knew about the Golden Ratio, mainstream Egyptologists are obliged to regard such a close agreement as coincidence. It is still the general view amongst academics that the discovery of Φ must be attributed to Euclid (c. 325–c. 265 BCE), although their flimsy reason for thinking this is merely that he was the first to refer to it in his Elements (his famous treatise on geometry and number, written about 300 BCE). This, of course, does not prove that he was the first to analyze the mathematics of the Golden Ratio, nor does it indicate that knowledge of it was unknown to anyone before him.

How the Golden Ratio Determines the Construction of the Sri Yantra



Perhaps it was never written down in the systematic way that made Euclid famous. Perhaps, before the time of Euclid, it was regarded as a deep secret that could not be disclosed in a book. The notion that the ancient Egyptians could have designed the largest structure ever built with an angle of inclination that simply by chance is only one minute of arc different from the angle θ is, frankly, so implausible as to be unbelievable, notwithstanding that it may be a respectable position to hold in the corridors of academia, in view of the absence of any reference to these mathematical ideas in surviving, ancient Egyptian records. But never underestimate the ability of evidence-based scholarship to fly sometimes in the face of common sense by denying the existence of things that lack the 'right' kind of evidence for them!

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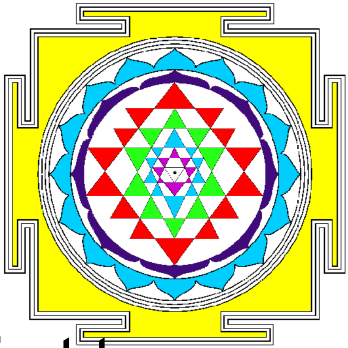

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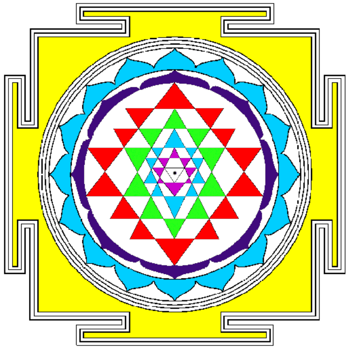
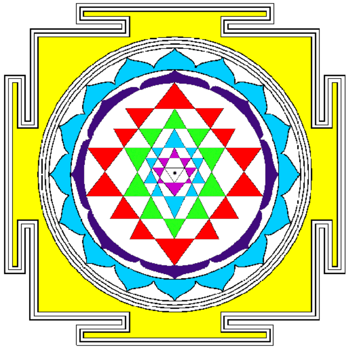
Anyway, the long-held academic view that Euclid was the first to write about the Golden Ratio is plain wrong and needs to be corrected because Dr Scott Olson, Associate Professor of Philosophy & Comparative Religion at Central Florida Community College, proved beyond doubt in 2002 that Plato referred to it about 80 years earlier in his Republic (c. 380 BCE), albeit in a more enigmatic way.* Indeed, as Olsen has pointed out, Sir Thomas Heath, the distinguished historian of ancient Greek mathematics, stated** in his The Thirteen Books of Euclid's Elements that Plato and his students in the Academy worked on theorems about the Golden Ratio.

How the Golden Ratio Determines the Construction of the Sri Yantra



Euclid was born about 22 years after Plato died. Given that Plato borrowed much of his mathematics from the Pythagoreans and that Pythagoras spent many years in Egypt, studying with its priests, it is highly plausible (indeed, probable) that — like so much of his wisdom — the latter learnt about the mathematics and philosophy of the Golden Ratio from his time in that country. This, of course, has to remain a speculation. However, only someone still conditioned by the long-held (but now discredited) belief in the West that ancient Greece was the birthplace of all science and mathematics could remain unconvinced by the astonishing closeness of the Great Pyamid's inclination angle to the angle θ. That the largest triangles of the Sri Yantra have the shape of the vertical cross section of the Great Pyramid is no less remarkable. For those unwilling to accept that the sacred geometries of religions share a fundamental, mathematical design sometimes expressed in their architectures, this has to be another coincidence. But those who cannot believe such improbable miracles have a more sensible explanation......

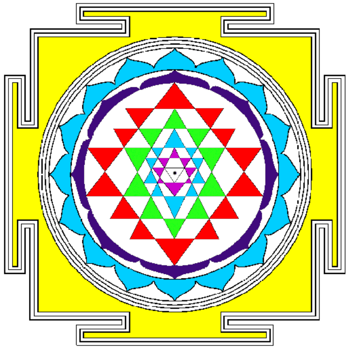


How Fibonnaci Numbers Shape the 3-Dimensional Sri Yantra

Some of the corners of triangles in the layers of the pyramidal, or 3-dimensional, Sri Yantra lie vertically above corners of triangles in adjacent layers. Such pairs of corners are denoted by pairs of differently coloured half-circles in the two diagrams above. The central triangle lies directly above the first layer of eight triangles. Above it is the so-called "bindu" (black dot), known as "Sarva Anandamaya," which represents the Absolute, the source of the Divine Creation mapped by the Sri Yantra. The numbers of corners of triangles in the various layers shown in Figure 1 are:

Central triangle: 3 white corners;
Layer 1: (8+8=16) violet corners of 8 violet triangles;
Layer 2: (10+20=20) blue corners of 10 blue triangles;
Layer 3: (10+10=20) yellow corners of 10 yellow triangles;
Layer 4: (14+14=28) red corners of 14 red triangles

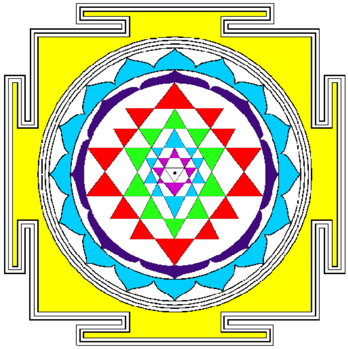
How Fibonnaci Numbers Shape the 3-Dimensional Sri Yantra



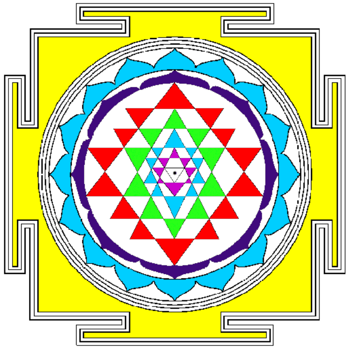
(3+16+20+20+28=87) corners of (1+8+10+10+14=43) triangles surround the centre (shown as a black circle) of the central triangle, above which hovers the bindu as a single point. 87 is the number value of Levanah, the Mundane Chakra of Yesod, which is the penultimate Sephirah of Construction. The 3-dimensional Sri Yantra constitutes a system of (1+1+87=89) points when the centre of the central triangle and the bindu above it are included. The number 89 is the 11th member of the well-known Fibonacci sequence:

1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233, ...

How Fibonnaci Numbers Shape the 3-Dimensional Sri Yantra

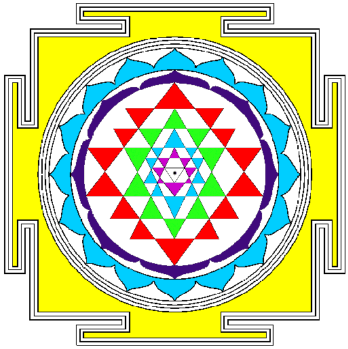


This is an infinite series of positive integers whose nth members an are defined by: an = an−1 + an−2, where a0 = 0 and a1 = 1. Given that the bindu is an independent point that — in the pyramidal Sri Yantra — lies on the vertical axis passing through the centre of the central triangle, the latter point is needed to define this axis orthogonal to the four parallel layers of triangles so as to fix the position of the bindu relative to them. This means that a minimum number of 89 points is needed to construct the 43 triangles of the Sri Yantra in three dimensions when they are stacked one above the other in four sheets or layers.



How Fibonnaci Numbers Shape the 3-Dimensional Sri Yantra

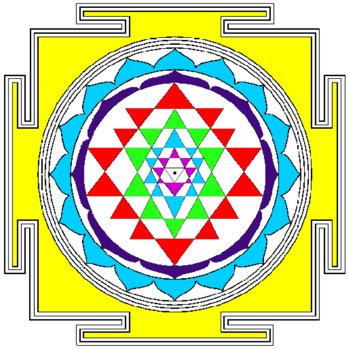
The bindu corresponds to the Fibonacci number 1, the first member of the sequence, whilst the centre of the central triangle corresponds to the second member, which is also 1. In Figure 2, the 89 points consist of the 34 green tips of the (10+10+14=34) triangles in layers 2, 3 & 4 and 55 other points/corners. The latter comprise 34 brown corners at the bases of the 34 triangles in layers 2, 3 & 4 and 21 points/corners made up of the 16 corners of the eight triangles in layer 1, namely, eight orange tips & eight violet corners at their bases, the three white corners of the central triangle, its centre (black circle) and the bindu (black dot) hovering directly above it.



How Fibonnaci Numbers Shape the 3-Dimensional Sri Yantra

We see that all the Fibonacci numbers up to 89 measure various sets of points that shape the geometry of the 3-dimensional Sri Yantra. If these sets had been created by a highly contrived selection of points, there would, obviously, be no significance to this pattern of Fibonacci numbers in the Sri Yantra because of the lack of natural underpinning of these points by its geometry. But this is not the case here. The first 11 Fibonacci numbers are compounded from corners of complete sets of triangles in the layers, not from odd bits and pieces of them picked in order to generate the right numbers.

How Fibonnaci Numbers
Shape the 3-Dimensional Sri Yantra

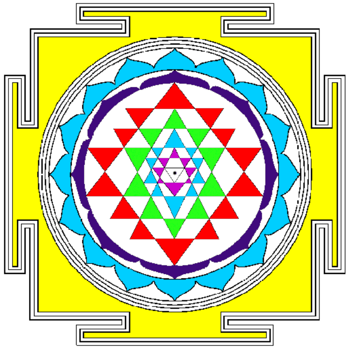


The correlation between these numbers and the geometrical features of the Sri Yantra that underpin them is natural, not artificial. It is implausible, therefore, to suggest that it could be just coincidence that there are 89 points, of which 21 points do not belong to the last three layers of triangles and 55 are not tips of the atter, leaving 34 points that are tips. Readers should ask themselves: what is the likelihood of four consecutive, Fibonacci numbers appearing by chance in such a natural manner?

The 43 triangles have 129 sides, where 129 is the number value of YAHWEH SABAOTH, the Godname of Netzach. The 42 triangles in the four separate layers have 84 corners, where

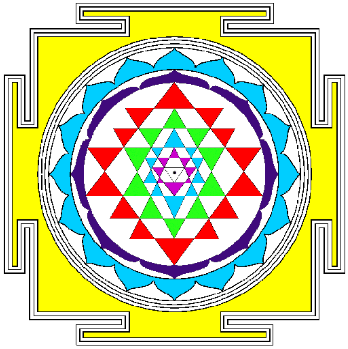
84 = 12 + 32 + 52 + 72,

How Fibonnaci Numbers Shape the 3-Dimensional Sri Yantra

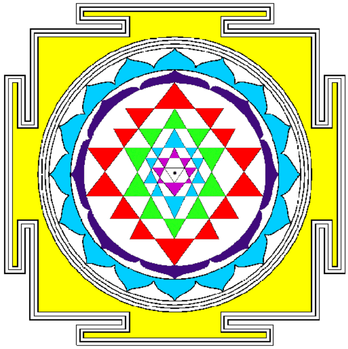


and 126 sides, i.e., (84+126=210=21×10) corners & sides, showing how EHYEH, the Godname of Kether with number value 21, prescribes the 3-dimensional Sri Yantra. Therefore, 84 points and (126+42=168) lines & triangles surround the central triangle. This is one way in which the Sri Yantra embodies the superstring structural parameters 84 & 168 (for other ways, see Superstrings as sacred geometry/Sri Yantra). (87+129=216) points & lines surround the axis that passes through the bindu and the centre of the central triangle. 216 (=63) is the number of Geburah, which is the sixth Sephirah of Construction, counting from Malkuth.

How Fibonnaci Numbers Shape the 3-Dimensional Sri Yantra



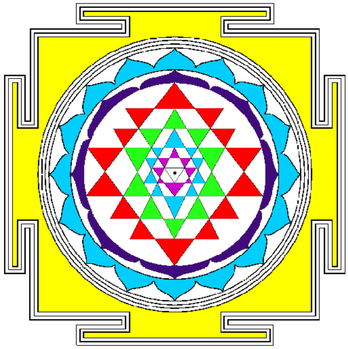
When all the 43 triangles are Type A, the centres of the 42 triangles surrounding the central one become added to the 89 points, generating 131 points, where 131 is the number value of Samael, the Archangel of Geburah. Each Type A triangle has 15 hexagonal yods, so that the number of hexagonal yods in these 42 triangles = 42×15 = 630. Alternatively, Table 6 in Article 35 proves that 630 yods line the boundary of the 126 tetractyses that make up the 42 Type A triangles surrounding the central triangle. This is the number value of Seraphim, the Order of Angels assigned to Geburah. Notice also that, as the tips of six of the 14 triangles in the fourth layer touch the circle circumscribing the base of the pyramidal Sri Yantra, (42−6=36) of the 42 triangles do not touch it.



How Fibonnaci Numbers Shape the 3-Dimensional Sri Yantra

The value of ELOHA, the Godname of Geburah, is 36. We find that four number values referring to the same Sephirah, namely, 216, 36, 131 & 630, emerge naturally from simple considerations of the geometrical composition and yod populations of the 3-dimensional Sri Yantra. Such an amazing conjunction of numbers cannot, plausibly, be dismissed as coincidence. Instead, it arises because the source of the Sri Yantra revelation as a yantra sacred to Hindus is the same as the source of the Kabbalah, the mystical teachings of Jews. This source is the Mind of God, which may be accessed by humans during mystical states of consciousness and which provides the archetypal components of the "Perennial Philosophy" — the esoteric tradition at the heart of the world's religions.

How Fibonnaci Numbers Shape the 3-Dimensional Sri Yantra



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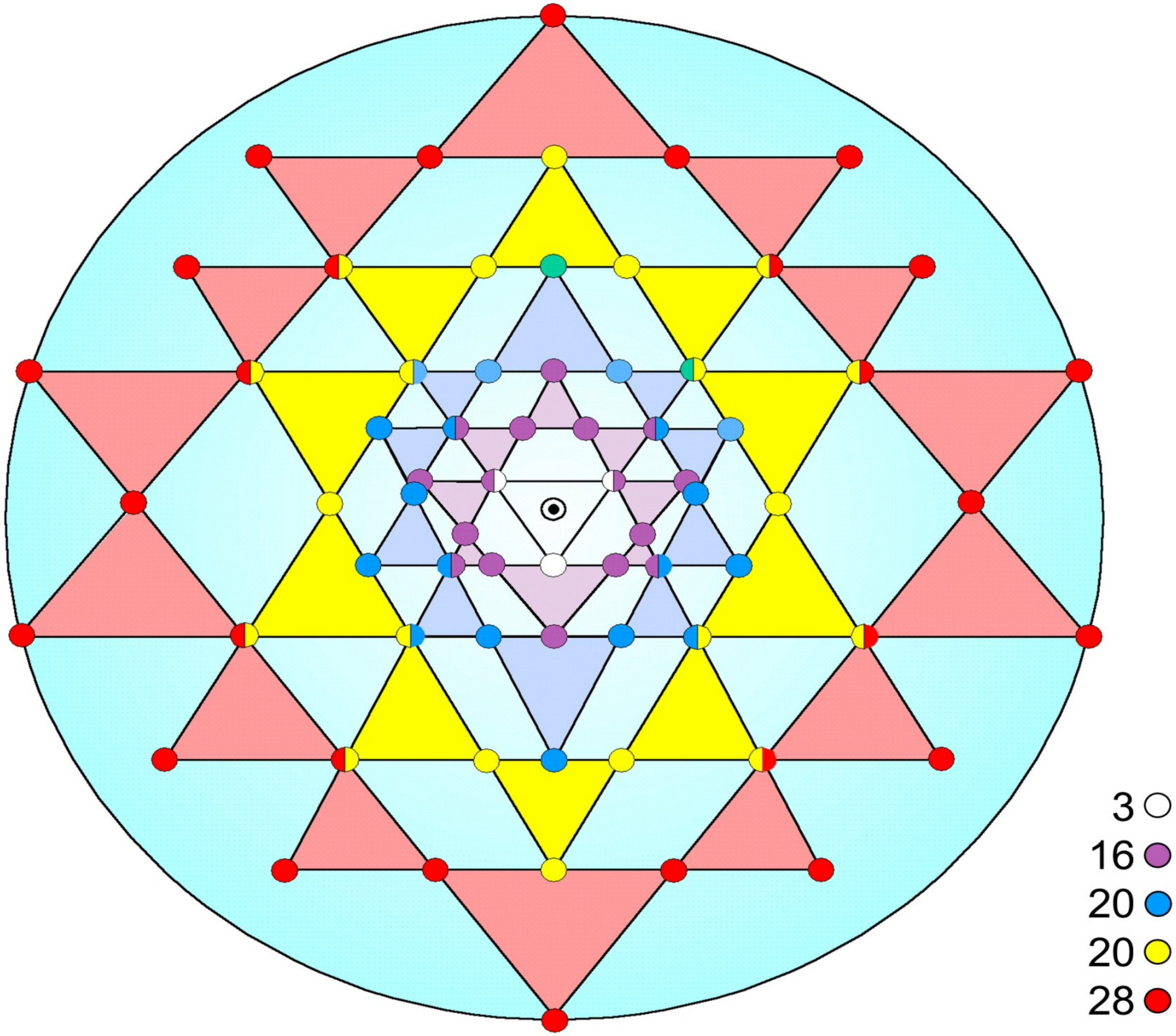
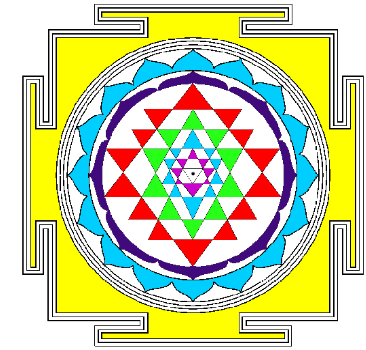


In the 3-d Sri Yantra, the 87 corners of 43 triangles surround the centre (black circle) of the central triangle, above which lies the bindu (black point).

How Fibonnaci Numbers
Shape the 3-Dimensional Sri Yantra



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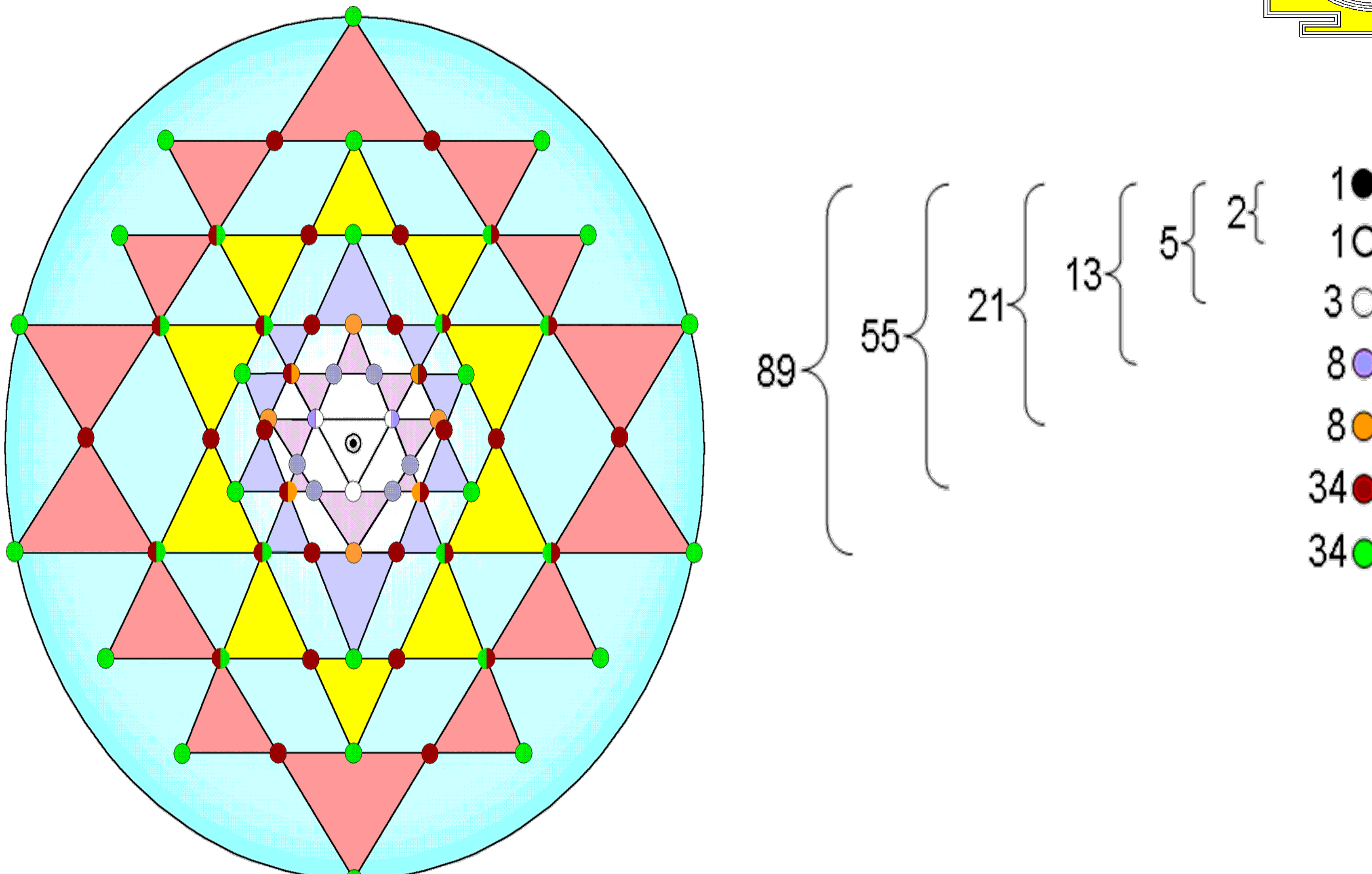

The 89 points needed to construct the 3-d Sri Yantra comprise the 34 tips of the 34 triangles in the 2nd, 3rd & 4th layers and 55 other points.