International Discovery of Ali π

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Phase 1

Introduction and History of Most Famous Mathematical Perfect Constant

5 Important and Famous Mathematical constants



Most Famous Mathematical Constant

T - Most Famous Ratio in Mathematics and in the History of Mankind

Universal Constant Ratio



TC = Circumference of a circle/Diameter of a circle

Circle – Mathematical Definition

A circle is a simple closed curve that divides the plane into an interior and exterior. It has a perimeter, called a circumference of length 2π r and encloses an area of 2π r². The set of all Points in a plane, at a given distance, called the radius, from a fixed point, called the center.

"Circle" comes from the Latin – 'Circus', which refers to a large round or rounded oblong enclosure in which the famous Roman chariot races were held.

Perfect Circle and π

"The circle is one of the noblest representation of the Deity, in his noble works of human nature. It bounds, determines, governs, and dictates space, bounds latitude and longitude, refers to the sun, moon, and all the planets, in direction, brings to the mind thoughts of eternity, and concentrates the mind to imagine for itself the distance and space it comprehends. It rectifies all boundaries; it is the key to information of the knowledge of God."

John Davis – The Measure of the Circle, 1854

Mysterious **T**

"Probably no symbol in mathematics has evoked as much mystery, romanticism, misconception and human interest as the number pi."

William L. Schaaf (Nature and History of Pi)

Center of a Circle

In geometry, the center of a circle is the **point equidistant** from the points on the edge. Similarly the center of a sphere is the point equidistant from the points on the surface and the center of a line segment is the midpoint of the two ends

Radius of a circle

- In classical geometry, a radius of a circle or sphere is any line segment from its center to its boundary. The radius of a circle or sphere is the length of any such segment. The radius is half the diameter.
- The relationship between the radius and the circumference of a circle is:

$\mathbf{r} = \mathbf{C}/(2 \times \pi)$

Where r = radius of a circle Pi = Circumference divided by diameter of a circle C = circumference of a circle.

Diameter of a circle

In geometry, a diameter of a circle is any straight line segment that passes through the centre and whose endpoints are on the circular boundary. The diameter is the length of such a line segment.

All the diameters of a given circle have the same length. This length is twice the radius of a circle. The diameter of a circle is also called the longest chord that the circle has.

The diameter of a circle – d = 2 x r where 'r' = radius of a circle

Circumference of a circle

The circumference of a circle is the distance around the circle. Circumference is a kind of perimeter.

The circumference of a circle can be calculated from its diameter using the formula:

$C = \pi x d$ where'd'= diameter of a circle

$C = 2 \times \pi x r$

where 'r'= radius of a circle. and Pi = constant ratio of the circumference and the diameter of a circle.

Circumference of a Circle



Circumference of a circle = $2\pi r$

 πd

Area of a Circle

The Area of a Circle is expressed in the equation as:

Area of a Circle = $\pi x (r x r)$ = (1/4) x $\pi x (d x d)$

Where r = radius of a circle d = diameter of a circle. And Pi = Circumference divided by the diameter of a circle = C/d

Chords and Circle

- Chords equidistant from the center of a circle are equal in length.
- The equal length chords are equidistant from the center.
- The perpendicular bisector of a chord passes through the center of a circle.
- If a central angle and an inscribed angle of a circle are subtended by the same chord and on the same side of the chord, then the central angle is twice the inscribed angle.

Definition of a Great circle

- A great circle is a circle on the surface of a sphere that has the same circumference as the sphere, dividing the sphere into 2 equal hemispheres.
- We can also define the great circle on a sphere is a circle on the sphere's surface whose center is the same as the center of the sphere. It is the intersection of a sphere with a plane going through its center.
- A Great Circle is the 'largest Circle' that can be drawn on a given sphere. The great circle on the spherical surface is the path with the smallest curvature and therefore an arc – an orthodrome is the shortest path between 2 points on the surface and the distance between any two points on a sphere is known as the great – circle distance.

Compass and Circle



□ Early science, particularly geometry and astronomy/ astrology, was connected to the divine for most medieval scholars.

In this 13th Century manuscript is a symbol of God's act of Creation, as many believed that there was something intrinsically <u>"divine" or "perfect"</u> that could be found in <u>circles.</u>

T - Different Names in History

1. Ludophian Number

2. Archimedes Constant

3. Greek Pi - π

Zero is a Circle

Zero is regarded as the biggest discovery in Mathematics and sciences.
Zero's shape is Circle.
O (Zero) = O (Circle)



Geometry and Numbers

Geometry:

It is the study of the properties of shapes and the space around them, from a simple triangle to the most complex solid. For example, the study of shapes like triangle and ico-sahedron and the relationship between them.

Numbers:

A number is a mathematical concept used to describe and assess quantity. It is an abstract entity representing a quantity, used to express how many things are being referred to, or how much there is of some thing or property; an arithmetical value corresponding to a particular quantity of something.

Significance of Pi

Historians estimate that by 2000 B.C. humans had noticed that the ratio of circumference to diameter was the same for all circles. This discovery hinged on the idea of proportion - in this case humans noticed that if you double the distance "across" a circle, then you double the distance "around" it. In today's algebraic notation this implied the formula



Significance of Pi (Cont..)

The significance of this discovery is clear: Circles are everywhere - in the sun, the moon, the pupils of our eyes, the most basic religious rituals and the earliest man-made structures. Achieving a greater mathematical understanding of Pi would lead to scientific and technological advances that would further the development of civilization, as well as creating some very interesting problems in pure mathematics

First Value of Pi calculated in Egypt – **3.16....**

• First Value of Calculated by Egyptian scribe Ahmes π = 256/81

= 3.160.....

- = 3.16. First ever value found around 1650 BC.
- Ahmes began scroll with the words:

"The Entrance into the Knowledge of All Existing Things"

and remarks in passing that he composed the scroll 'in likeliness to writings made of old.' Towards the end of the scroll, which is composed of various mathematical problems and their solutions, the area of a circle is found using a rough sort of pi."

First Value of Pi calculated in Egypt – 3.16.....



Archimedes' Constant

Principle of Archimedes' method to approximate $\, m \pi$

- Around 200 BCE, Archimedes of Syracuse, one of the greatest mathematicians of the ancient world, approximated that pi is somewhere about 3.14 in fractions because Greeks did not have decimals.
- Archimedes was the first to give a scientific method for calculating pi to arbitrary accuracy.
- Archimedes of Syracuse discovered, by considering the perimeters of 96-sided polygons inscribing a circle. When a circle's diameter is 1, its circumference is pi
- Archimedes knew that he had not found the value of **pi** but only an approximation within those limits.

Famous Mathematicians Who Tried to Calculate Pi in the History

- **1. Egyptian Rhind Ahmes**
- 2. Babylonians
- **3.** Archimedes
- 4. Hon Han Shu
- 5. Brahmagupta
- 6. Al Khwarizmi
- 7. Fibonacci -"Pi from now on calculated in decimal places."
- 8. Madhava of Sangamagrama discovered the infinite power series expansion of pi
- 9. Jamshid Masud Al Kashi

10. Ludolph Van Ceulen

Famous Mathematicians Who Tried to Calculate Pi in the History (cont..)

- **11. Isaac Newton**
- 12. Leonhard Euler used letter pi in his book and pointed that pi may be transcendental
- 13. Johann Heinrich Lambert who proved that pi is irrational
- 14. Rutherford
- **15.** Srinivasa Ramanujan
- 16. D.F. Ferguson
- **17.** Felton
- **18. J.Guillord**
- **19.** Yasumasa Kanada 1.24 trillion places on Hitachi SR8000/MPP (64 nodes), 600 hours

Pi = 3.14159265358979323846264338327950288419716 939937510...1.24 trillion decimal places

USA – Indiana Pi Bill – 1897 AD

USA - Indiana Pi Bill – 1897 AD



- Goodwin's model circle as described in section 2 of the bill. It has a diameter of 10 and a circumference of 32; the chord of 90° has length 7
- The 'Indiana Pi Bill' of 1897 AD , which never passed out of committee, has been claimed to imply a number of different values for Pi, although the closest it comes to explicitly asserting one is the wording, ' the ratio of the diameter and circumference is as five-fourths to four' which would make Pi = 3.2

Pi = 3.2 (as proposed by Indiana Pi Bill in 1897 AD in USA).

Squaring the circle and circle squarers



Squaring the circle: the areas of this square and this circle are equal

The first mathematician, who is on record as having attempted to square the circle is **Anaxagoras Plutarch**, in his work On Exile which was written in the first century AD, says:

"There is no place that can take away the happiness of a man, nor yet his virtue or wisdom."

Squaring the Circle



□ Squaring the circle means to make the square with the exact and equal area of a circle. As we cannot calculate the area of a circle exactly with the irrational and transcendental value of Pi, so squaring the circle became impossible solution till now.

□ Squaring the Circle is **declared impossible** with the proof that is a transcendental number – Dream of 4000 years to square the circle was put to death.

'God exists since mathematics is consistent, and the devil exists since we cannot prove it.'

(Andre' Weil, French Mathematician)

Early Circle Squarers

- From that time, the expression, 'circlesquarers' came into usage. Indeed we know of the work of a number of mathematicians on this problem during that period:
- Oenopides
- Antiphon
- Bryson
- Hippocrates
- Hippias

Area = 100 Area = 100

Ahmes Papyrus – Problem – 50 Squaring the Circle

The problem – 50 reads as:

'A circular field has diameter 9 khet. What is its area?'

Ahmes' solution is:

`Take away thou 1/9 of it, namely 1; the remainder is 8. Make thou the multiplication 8 times 8; becomes it 64; the amount of it, this is, in area 64 setat.'

When we take this Ahmes solution as a general formula, then in modern notation, we get the formula for the area A of a circle of a diameter d as:

 $A = square of (d - d/9) = (64/81) (d)^2$

Aristopenes and Squaring the Circle

 There is a reference in a play *Birds*, written by Aristopenes in about 414 B.C.

"Meton responded to Peisthetaerus: Well I now apply the straight rod – so – thus squaring the circle: and there you are. In the center you have your market place: straight streets leading into it, from here, from here, from here. Very much the same principle, really, as the rays of a star: the star itself is circular, but sends out straight rays in every direction."

Antiphon and Bryson Squaring the Circle



The practicality of Antiphon's idea is apparrent since it is already difficult to see the excess area between the duodecagon(pink) and the circle.

Bryson's idea was to "sqeeze" out the actual area, as illustrated by the two blue hexagons.

Antiphon and Bryson both produced arguments relating to squaring the circle which were to prove important in the future development of mathematics. Bryson, a student of Socrates, took the obvious approach of using inscribed and circumscribed polygons to squeeze the area of the circle. Imagine drawing a square inside a circle such that all four of its corners touch the circle, and a second square around the circle such that each side is tangent to the circle. The area of the circle would be somewhere between the areas of these two squares. By using hexagons, pentagons, and so on, the circle's area is constrained to smaller and smaller ranges. Bryson tried hard but failed to prove that it was possible to compute the circle's area exactly by taking this approach far enough.

Squaring the circle – as a metaphor

Squaring the circle has become a metaphor in the history of mankind. For example, in Spanish, the expression, "descubriste la cucdratura del circulo" meaning,

'You discovered the quadrature of the circle'

is often used to dismiss claims that someone has found a simple solution to a particularly hard or intractable problem.


Were the ancient Greeks idiots?

John Ruch writes in his article in 2004 about the squaring of the circle as:

"It refers to the geometrical attempt -- now known to be impossible - to create a square that has the exact same area as a given circle. But what the common phrase refers to is an ancient Greek theoretical formulation. It's actually one of three conundrums from ancient Greek geometry, all highlighting different theoretical difficulties. Not surprisingly, it's also the one with the catchiest name and involving the simplest shapes. The other two are doubling or duplicating the cube and trisecting an angle.

Squaring the circle is also the 'most impossible' of the three – the other two involve operations that are possible in certain specialized circumstances. Now, the fact is, many Greek mathematicians explored other ways of squaring the circle, using marked points, dynamic curves, conical sections and other geometrical arcane. Such methods can get you pretty close, whereas using the arbitrary straightedge and compass method gets you nowhere. So why the drawing rules?

Were the ancient Greeks idiots? (Cont..)

- As a simplified thought experiment, it also emphasizes the key difficulty of the whole problem: defining the number Pi, which is really what the whole squaring the circle stunt is all about. Pi is the ratio between the circumference of any circle and its diameter. Pi is also, therefore, a key number in determining the area of a circle- area equals Pi times the radius squared.
- Problem is, Pi is not a whole number ratio. It's an endlessly repeating decimal monstrosity that begins 3.1415...... and continues on without a pattern, apparently forever. It has been calculated to many billions of decimal places. In short, a circle – a defined, geometric figure – contains a mathematical number that is literally infinitely impossible. It is a grand mystery, and it means that we can't even say exactly what the area of a circle is, let alone what a square of the same area would look like.

Were the ancient Greeks idiots? (Cont..)

- Put in math lingo, pi and its square root can't be expressed by any finite set of mathematical operations. That includes any series of geometrical straight lines, like a square.
- Put in plain English, what squaring the circle really means is drawing a line that is the square root of Pi in length, to use as the sides of the square. But the square root of Pi is also an endlessly repeating decimal. You can't draw a finite square with infinitely long sides, now, can you?

Were the ancient Greeks idiots? Did they really think it would be fun to try to draw a finite line representing an infinite ratio? They were a bunch of lazy slaveholders with plenty of time to sit around and think up weird things, so knowing better probably wouldn't have stopped them – but they didn't know better. Squaring the circle was an attempt to trap Pi and squeeze it for information."

The circle is one of the greatest Enigmas of Mathematics

- It is defined as the set of points in a given plane at a given distance from a center point.
- Practically, a compass is an excellent tool for describing such a circle. It is one of the simplest concepts, a cornerstone in the edifice of mathematics. Yet, it eludes mathematical exactness up till now. It is not difficult to see that why so many wise men pondered the problem in hopes of imposing order upon an irrational Pi and squaring the circle with a compass and a straight edge.

Enigma Of Mathematics

Squaring the circle is one of the three great problems of Classical Geometry, along with the trisection of the angle and the duplication of the cube.

Irrational Value of Pi

3.14159265358979323846264338327950288419716939937510582974944592307816406286208998628034825342117067982148086513282306647093846095505822317253594081284811174502841027019385211055596446229489549303819644288109756659334461284756482337867831652712019091456856692346034861045432664821339360726024914127372458700660631558817488152092096282925409171536436789259036001133053054882046652184146951941511609433057270365759591953092186117381932611793105118548074462379962749567351885752724891227938183011949129833673364406566430860213949463952247371907021798609437027705392171762931767523846748184676694051320005681271452635608277857713437519577818577805321712268066130019278766111959092164201989.....

Irrational Pi = 3.1415..... 1.24 Trillion Decimal places till 2002 AD

Once Goethe quoted:

"It has been said that figures rule the world. Maybe, but I am sure that figures show us whether it is being ruled well or badly."

Irrational Pi on Irrational Path

Irrational and Transcendental - 1.24 trillion decimal places

By 2002 AD, Yasumasa Kanada and team, Hitachi SR8000 / MPP (64 nodes), 600 hours found the value of Pi up to: 1,241,100,000,000 decimal places of Pi.

"Exploring Pi is like exploring the universe."

--David Chudnovsky

Un Ending Irrational Pi Irrational Pi –

3.1415926535897932384626433 832795028841971...1.24 trillion decimal places

"Knowledge is a Point, Ignorant people spread it."

(Imam ALI)

Irrational and Transcendental **T**

Johann Heinrich Lambert proved that pi is an irrational number and it is a lie to look for rational pi in 1761 because it cannot be written as the ratio of two integers.

In 1882, Ferdinand von Lindemann showed that pi is also transcendental number, which means that there is no polynomial with rational coefficients of which Pi is a root.

Mathematicians in the search of π

Many formulas in analysis contain pi, including infinite series and infinite product representations, integrals, and so-called special functions.

The area of the unit disc:

$$2\int_{-1}^{1}\sqrt{1-x^2}\,dx = \pi$$

Half the circumference of the unit circle

$$\int_{-1}^{1} \frac{dx}{\sqrt{1-x^2}} = \pi$$

Mathematicians in the search of T (Cont...)

François Viète, 1593 (proof)

$$\frac{\sqrt{2}}{2} \cdot \frac{\sqrt{2+\sqrt{2}}}{2} \cdot \frac{\sqrt{2+\sqrt{2}+\sqrt{2}}}{2} \cdots = \frac{2}{\pi}$$

Leibniz' formula (proof):

$$\sum_{n=0}^{\infty} \frac{(-1)^n}{2n+1} = \frac{1}{1} - \frac{1}{3} + \frac{1}{5} - \frac{1}{7} + \frac{1}{9} - \dots = \frac{\pi}{4}$$

Wallis product, 1655 (proof)

$$\prod_{n=1}^{\infty} \left(\frac{n+1}{n}\right)^{(-1)^{n-1}} = \frac{2}{1} \cdot \frac{2}{3} \cdot \frac{4}{3} \cdot \frac{4}{5} \cdot \frac{6}{5} \cdot \frac{6}{7} \cdot \frac{8}{7} \cdot \frac{8}{9} \cdots = \frac{\pi}{2}$$

Mathematicians in the search of T (Cont...)

Gamma function evaluated at 1/2

$$\Gamma\left(\frac{1}{2}\right) = \sqrt{\pi}$$

Sterling's approximation

$$n! \sim \sqrt{2\pi n} \left(\frac{n}{e}\right)^n$$

 Euler's identity (called by Richard Feynman "the most remarkable formula in mathematics")

$$e^{i\pi} + 1 = 0$$

Efficient infinite series- Calculating value of π

$$\sum_{k=0}^{\infty} \frac{k!}{(2k+1)!!} = \frac{\pi}{2}$$

$$12\sum_{k=0}^{\infty} \frac{(-1)^{k}(6k)!(13591409 + 545140134k)}{(3k)!(k!)^{3}640320^{3k+3/2}} = \frac{\pi}{2}$$

$$\frac{2\sqrt{2}}{9801}\sum_{k=0}^{\infty} \frac{(4k)!(1103 + 26390k)}{(k!)^{4}396^{4k}} = \frac{1}{\pi}$$

The following are good for calculating arbitrary binary digits of pi:

$$\sum_{k=0}^{\infty} \frac{1}{16^k} \left(\frac{4}{8k+1} - \frac{2}{8k+4} - \frac{1}{8k+5} - \frac{1}{8k+6} \right) = \pi$$

$$\frac{1}{2^6} \sum_{n=0}^{\infty} \frac{(-1)^n}{2^{10n}} \left(-\frac{2^5}{4n+1} - \frac{1}{4n+3} + \frac{2^8}{10n+1} - \frac{2^6}{10n+3} - \frac{2^2}{10n+5} - \frac{2^2}{10n+7} + \frac{1}{10n+9} \right) = \pi$$

Mathematicians never found the the Rational and Real Value of PI till today

What is the Rational and Exact value of π ?

Computation of π

"The computation of Pi is virtually the only topic from the most ancient stratum of mathematics that is still of serious interest to modern mathematical research."

> Len Berggen, Jonathan Borwein and Peter Borwein – Pi- A Source Book

Important persons who computed Pi in recent years to many digits

- Peter B. Borwein 10 billionth hexadecimal with BBP algorithm. A.G.M. with quartic algorithm.
- Jonathan M. Borwein A.G.M. with quartic algorithm.
- David H.Bailey 29 million and 10 billionth hexadecimal with all methods.
- Fabrice Bellard 50 and 100 billionth hexadecimal with BBP algorithm.
- D.V. Chudnovsky and G.V. Chudnovsky 1, 2 and 4 billion with Chudnovsky formula. By March 1996, more than 8 billion digits have been calculated.

Important persons who computed Pi in recent years to many digits (Cont..)

- Guillord and Bouyer 250,000, 500,000, 1 million and 2 million with arctan formulas.
- William Gosper 17.5 million digits with Ramanujan formula.
- Daniel Shanks and John Wrench Jr. 100,265 in 1961 with arctan formulas.
- Simon Plouffe 100 million hexadecimal digits with A.G.M. and 3.2 billion, 4.2 billion and 6.4 billion decimal with A.G.M. methods.
- Yasumasa Kanada 1.24 trillion places on Hitachi SR8000/MPP (64 nodes), 600 hours till 2002.

Piphilology

Piphilology comprises the creation and use of mnemonic techniques to remember a span of digits of the mathematical constant pi.

The word is a play on Pi itself and the linguistic field of philology. Even before computers calculated Pi, memorizing a record number of digits became an obsession for some people.

The current world record is 100,000 decimal places, set on October 3, 2006 by Akira Haraguchi.

Role of π in our world

 Chris Witcombe from Sweet Briar College writes in his article on Pi as:

"Physicists have noted the ubiquity of pi in nature. Pi is obvious in the disks of the moon and the sun. The double helix of DNA revolves around pi. Pi hides in the rainbow, and sits in the pupil of the eye, and when a raindrop falls into water pi emerges in the spreading rings. Pi can be found in waves and ripples and spectra of all kinds, and therefore pi occurs in colors and music. Pi has lately turned up in superstrings.

Pi occurs naturally in tables of death, in what is known as a Gaussian distribution of deaths in a population; that is, when a person dies, the event 'feels pi'. It is one of the great mysteries why nature seems to know mathematics."

According to Havelock Ellis in his book – The Dance of Life – wrote:

"It is here in mathematics that the artist has the fullest scope of his imagination."

T and its Usage

- Pi is used in Mechanical problems, drawing, machining, etc. Pi occurs in radio signals, TV, radar, telephones, etc. Sine waves have a fundamental period of 2pi, so pi becomes vital in signal processing, spectrum analysis i.e. finding out what frequencies are in a wave you receive or send, etc.
- Everyone's favorite distribution normal or Gaussian has pi in the formula and it is used in all areas of engineering to simulate unknown factors and loading conditions.
- Pi is used in Navigation, global paths, global positioning. When planes fly great distances they are actually flying on an arc of a circle. The path must be calculated as such in order to accurately gauge fuel use, etc. Additionally, when locating your self on a globe, pi comes into the calculation in most methods.

T and its Usage (Cont..)

- Pi is used in Physics in cosmological constant, Heisenberg's uncertainty principle, Einstein's field equation of general relativity, Coulomb's law for the electric force, magnetic permeability of free space, etc.
- Pi is used in analysis including infinite series, integrals and so called special functions. Pi is used in the area of the unit disc, half the circumference of the unit circle, Leibniz formula, Wallis product, Faster product, Symmetric formula, Bailey-Borwein Plouffe algorithm, etc
- Pi is used in number theory like theory of elliptic curves and complex multiplication which derives the approximation of pi, dynamical systems and ergodic theory. Pi is also used in probability and statistics.

Classical Geometry

$$C=2\pi r,$$

where *C* is the circumference of a circle and *r* is the radius.

$$A = \pi r^2 = \frac{1}{4}\pi d^2$$

where A is the area of a circle and r is the radius

$$V = \frac{4}{3}\pi r^3,$$

where V is the volume of a sphere and r is the radius

$$A = 4\pi r^2$$

where A is the surface area of a sphere and r is the radius.

"For the things of the world cannot be made known without knowledge of mathematics." (Roger Bacon)

Classical Geometry(cont..)

Volume of cylinder of height *h* and radius *r*

$$V = \pi r^2 h$$

Volume of cone of height *h* and radius *r*

$$A = 2(\pi r^2) + (2\pi r)h = 2\pi r(r+h)$$

Surface area of cylinder of height *h* and radius *r*

$$V = \frac{1}{3}\pi r^2 h$$

Surface area of cone of height *h* and radius *r*

$$A = \pi r^{2} + \pi r \sqrt{r^{2} + h^{2}} = \pi r (r + \sqrt{r^{2} + h^{2}})$$

Physics using π

The number Pi appears commonly in equations describing fundamental principles of the Universe, due in no small part to its relationship to the nature of the circle and, correspondingly, spherical coordinate systems

The cosmological constant:

$$\Lambda = \frac{8\pi G}{3c^2}\rho$$

Heisenberg's uncertainty principle

$$\Delta x \Delta p \ge \frac{h}{4\pi}$$

Physics using π

Einstein's field equation of general relativity

$$R_{ik} - rac{g_{ik}R}{2} + \Lambda g_{ik} = rac{8\pi G}{c^4}T_{ik}$$

Magnetic permeability of free space

$$\mu_0 = 4\pi \cdot 10^{-7} \, \mathrm{N/A^2}$$

Coulomb's law for the electric force

$$F = \frac{|q_1 q_2|}{4\pi\epsilon_0 r^2}$$

Kepler's third law constant

$$\frac{P^2}{a^3} = \frac{(2\pi)^2}{G(M+m)}$$

Dynamical systems and Ergodic theory

Consider the recurrence relation

$$x_{i+1} = 4x_i(1-x_i)$$

Then for almost every initial value x0 in the unit interval [0, 1]:

$$\lim_{n \to \infty} \frac{1}{n} \sum_{i=1}^n \sqrt{x_i} = \frac{2}{\pi}$$

 This recurrence relation is the logistic map with parameter r = 4, known from dynamical systems theory.

"The numbers are a catalyst that can help turn raving madmen into polite humans."

Philip J. Davis

Number theory using π

- The probability that two randomly chosen integers are co-prime is 6/π².
- The probability that a randomly chosen integer is square-free is
 6/π².
- The average number of ways to write a positive integer as the sum of two perfect squares is n/4.
- In the above three statements, "probability", "average", and "random" are taken in a limiting sense, i.e. we consider the probability for the set of integers {1, 2, 3,..., N}, and then take the limit as N approaches infinity.
- The product of $(1 1/p^2)$ over the primes, p, is **6/n²**.
- The theory of elliptic curves and complex multiplication derives the approximation

Number theory using Pi (Cont...)

The product of (1 – 1/p2) over the primes, p, is 6/n2.
 The theory of elliptic curves and complex multiplication derives the approximation

$$\pi\approx\frac{\ln(640320^3+744)}{\sqrt{163}}$$

Which is valid to about 30 digits.

"The Science of Pure Mathematics in its modern development may claim to be the most original creation of the human spirit."

(Alfred North Whitehead)

Probability and statistics using $oldsymbol{\pi}$

- In probability and statistics, there are many distributions whose formulæ contain π, including:
- Probability density function (pdf) for the normal distribution with mean μ and standard deviation σ

$$f(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-(x-\mu)^2/(2\sigma^2)}$$

pdf for the (standard) Cauchy distribution

$$f(x) = \frac{1}{\pi(1+x^2)}$$

• Note that since $\int_{-\infty}^{\infty} f(x) dx = 1$ for any pdf f(x), the above formulæ can be used to produce other integral formulae for n.

Probability and statistics using T (Cont...)

• A semi-interesting empirical approximation of π is based on **Buffon's needle problem**. Consider dropping a needle of length *L* repeatedly on a surface containing parallel lines drawn *S* units apart (with S > L). If the needle is dropped *n* times and *x* of those times it comes to rest crossing a line (x > 0), then one may approximate *n* using:

$$\pi \approx \frac{2nL}{xS}$$

 Another approximation of *n* is to throw points randomly into a quarter of a circle with radius 1 that is inscribed in a square of length 1. *n*, the area of a unit circle, is then approximated as

4 x (points in the quarter circle) / (total points).

Recent Famous Books and Authors on Pi

Mathematicians and scientist all over the world are still working day and night to find the real and rational value of Pi.

Some of the recent publications on Pi are:



1. The Joy of Pi by David Blatner

2. Life of Pi by Yann Martel

- 3. Pi: A Biography of the World's Most Mysterious Number by Alfred S. Posamentier
- Pi: A Biography of the World's Most Mysterious Number by Alfred S. Posamentier and Ingmar Lehmann

Recent Famous Books and Authors on Pi (Cont..)

- 4. Pi in the sky: Counting, Thinking and Being by John D. Barrow
- 5. Pi by Sean Gullette DVD
- 6. A History of Pi by Petr Beckman
- 7. Piece of Pi: Wit sharpening, Brain-bruising, Numbercrunching Activities with Pi by Naila Bokhari
- 8. The Number Pi by Pierre Eymard

 9. Pi- Unleashed by Jorg Arndt, Christoph Haenl, C. Lischka and D. Lischka
 10. Pleasures of Pi, e and other interesting Numbers by Y.E.O. Adrian
 11. Pi to Five Million Places by Kick Books
 12. Easy as Pi? An introduction to Higher Mathematics by Oleg A. Ivanov and R.G. Burns.

Pi - Day - March - 14 as Pi = 3.14....



Larry Shaw, the founder of Pi Day at the Exploratorium - California

4000 – Pi clubs in America and Europe

Pi - π Day

Pi Day – celebrated every year in Europe and USA on March – 14 as Π = 3.14.....



Pi - Shawl



Name: Pi Shawl

Designer: Elizabeth Zimmerman

Pattern Source: Knitter's Best of Shawls and Scarves or Knitter's Almanac

Yarn: lace weight Black Welsh Mountain Sheep wool

Hollywood Movie- TT (1998)

Directed by	Darren Aronofsky
Produced by	Eric Watson
Written by	Story: Darren Aronofsky ,Sean Gullette ,Eric Watson Screenplay: Darren Aronofsky

Pi – Most Mysterious Puzzle

- God's riddle

- God's puzzle
- God's password
- God's secret
- God's Number
- God's symbol of our Perfect Spherical Expanding Universe
TT - Symbol of Our Perfect Spherical Universe

Mathematician Paul writes on Pi as:

"Pi is fundamental to the way in which our universe functions; practically everything is dependent on Pi at some basic level: light, sound, energy, gravity, electromagnetic fields, matter itself.....In fact pi is so central that it can be seen as a symbol of our universe.

Pi represents an omniscience which we will never possess, but that we can nudge closer and closer to as we approach its true value. Calculating pi as a rational value or exact or real value is a quest parallel to trying to fully understand our universe. It is for this reason that we wish to calculate pi to millions of places and beyond.

TT - Unique Symbol of our Universe

TT ---- Unique Symbol of our Perefct Spherical Expanding Universe

What is accepted and believed today about Pi

- **1.** Pi is an irrational number.
- 2. Pi is a transcendental number and non-algebraic.
- 3. Pi is an approximate and estimated number.
- 4. Pi is an unending infinite decimal.
- 5. Is pi normal to base 10? We are not sure about it.
- 6. Circles cannot be squared an unaccomplished dream of Greek mathematicians
- **7.** Perfect circle does not exist
- 8. Perfect sphere does not exist
- 9. There is no definite pattern of numbers in pi.
- **10.** Pi cannot be solved or calculated so we have to go with the approximations.

Hundreds of approximations have been done so far to calculate the good approximate value of Pi

As a Civil Engineer, I know mathematically that:

Buildings build on wrong foundations are doomed to fall

Phase 2

Search of Perfect Circle and Perfect Sphere

Universe and Circles

"The universe was made on purpose, the circle said. In whatever galaxy you happen to find yourself, you take the circumference of a circle, divide it by its diameter, measure closely enough, and uncover a miracle -- another circle, drawn kilometers down stream of the decimal point....As long as you live in this universe, and have a modest talent for mathematics, sooner or later you'll find it."

Carl Sagan, Contact

Spherical Universe



Spherical Earth – **3rd** Planet of Sun

All the heavenly and celestial bodies of our Universe like stars, planets, moons, etc are 'Spheres'

Sphere – Perfect Symmetrical shape chosen and created by the Creator of our Universe.

Perfect Spherical Expanding Universe

According to Bertrand Russell in 'The study of Mathematics in Mysticism and Logic:'

"Mathematics possesses not only truth, but supreme beauty- a beauty cold and austere, like that of a sculpture."



Earth and Neptune – Two amazing spheres

I call our Universe as: Perfect Spherical Expanding Universe



The **8** planets and **3** dwarf planets of our Solar System

Is Our Universe - an Accident or Perfection?

 In case of Accident – There would be no symmetry in our Universe



 In case of Perfection – There should be symmetry in our Universe.



Our Perfect Spherical Universe is not an Accident

Our Universe is not the result of an accident. This is not an accidental or incidental Universe because if it is the result of an accident, then some heavenly bodies should be Celestial Triangles, some should be Celestial Rectangles, some should be Celestial Cubes and some should be of other irregular shaped bodies.

The presence of only 'Celestial Spheres' proves that this Universe is a 'Perfect Universe' created by One and Only Almighty God in a Perfect shape i.e. 'Spheres'. So this universe should show perfection of Creator and the Created and show the organized planning and creation of its Planner and Creator



The Perfect shape of planets is proving that our Perfect Spherical Universe is not an Accident

Perfect Spherical Expanding Universe



All Heavenly and Celestial Bodies of our universe are spheres

Spherical Planets of our Solar System



Spherical Planets of our Solar System

Creations in our Universe – Consistent, Rational, Logical and Constant Why the Value of Pi would be 'Inconsistent, Irrational, and Illogical' Pi – should be 'Rational, Logical, Consistent and Universal

Spherical Giants of Gas



The four gas Spherical giants against the Sun: Jupiter, Saturn, Uranus and Neptune

Circle and Sphere in a Planet - Saturn



Spherical Saturn

Earth and Neptune



Earth and Neptune – Two Amazing Spheres

Earth's Orbit and Circle

"The Earth's orbit is the measure of all things; circumscribe around it a dodecahedron and the circle containing this will be Mars; circumscribe around Mars a tetrahedron, and a circle containing this will be Jupiter; circumscribe around Jupiter a cube, and the circle containing this will be Saturn. Now inscribe within the Earth an icosahedron, and the circle contained in it will be Venus; inscribe within Venus an octahedron, and the circle contained in it will be Mercury. You now have the reason for the number of planets."

Johannes Kepler

Nature's choice of Shapes – Perfect shape of Circle or Sphere

- If there would be any other 'Perfect' shape in the mind of the Creator of our Universe, then He would have chosen that shape instead of 'Circle' or 'Sphere'.
- Creator's choice of shape = 'Circle or Sphere' in Universal Creations
- Nature's choice of Universal shapes = Circular or Spherical Universal shapes in our Universe.

"Mathematics is the handwriting on the human consciousness of the very Spirit of Life itself."

Claude Bragdon

Wheel- One of the earliest and biggest Inventions in history

A sphere or a circle may be represented as circular wheel.

Types of Wheels:

Wheel of Fortune.
 Bicycle wheel.
 Color wheel.
 Steering wheel.
 Ship's wheel.
 Artillery wheel.
 Tire
 Wire wheels.
 Breaking wheel.
 Driving wheel.
 The Bible Wheel
 Circular wheel.



A driving wheel on a steam locomotive

Spherical Eye

"Let no one ignorant of geometry enter my door." (Plato, The Republic)



Human Eye

Eye'.

The Creator of our Universe also created our human body on the same principle. The representative of 'Sphere and Circle' in our body is the 'Human



Spherical Human Eye

Zero and One Circle and Diameter Zero – 0 is a Circumference in Shape. One – 1 is a Diameter in a Shape. **Perfect Ali Pi = Circumference/ Diameter of a circle** = Zero/One = 0/1Zero and One is the One and the Only language of **Computers.**

π by Super Brain orπ by Super Computer

"The matter of the normalcy or non-normalcy of pi will never, of course, be resolved by electronic computers. We have here an example of a theoretical problem which requires profound mathematical talent and cannot be solved by computations alone. The existence of such problems ought to furnish at least a partial antidote to the disease of computeritis, which seems so rampant today."

Howard Eves, Mathematical Circles Revisited, 1971

Age of Perfection and Modeling

We are living in an age of 'Modeling' and 'Perfection.' In an industrial world, all the industries and factories make some models for their products and the rest of the production of the items or goods are solely based on the 'Perfect model' they made for their industrial goods.

For instance, the car manufacturers make some models for the production of rest of the cars of that model. For standardization and perfection, the presence of a 'Perfect Model' should have to be there.



Perfect Model of a Perfect Sphere

- Perfect Model' of a 'Perfect Sphere' should be the answer to this question. There should be a 'Perfect Model' of a 'Perfect Sphere' as a standard and reference for all the Spheres in our Universe like Sun, moon, earth, etc.
- The 'Perfect Ratio' of circumference and the diameter of that 'Perfect Sphere' is called the 'Perfect Pi', which I call as 'Ali Pi.'
- Perfect Sphere is a Perfect Model for all the Spheres of our Universe, life, time, space, mathematics and sciences.

Perfect Sphere – Perfect Model for All Spheres Vhat is a Perfect Sphere?

Perfect Sphere would be a Perfect Model for all the Spheres in our Universe.

We have to search 'Perfect Sphere'

To Aristotle, 'Perfect' meant 'Complete'

Perfect Pi = Perfect Circumference of a circle/ Perfect Diameter of a circle

Perfect Pi = Perfection/Perfection = Perfection

 Perfection: In broader sense, it is a state of completeness and flawlessness. The word, 'perfection' derives from the Latin 'perfection', and 'perfect' from 'perfectus'. These expressions come from the 'perficio' meaning to 'to finish', or 'to bring to an end'.

 'Perfection' thus literally means a 'finishing', and 'perfect' means 'a finished'.

Perfect and Perfection is defined and described as:

Which is complete and contains all the requisite parts.
 Which is so good that nothing of its kind could be better.
 Which has attained its purpose.

Circle – A Perfect Geometrical Shape

Circle is a Perfect , symmetrical and Universal shape in all the other geometrical shapes.

Compare Perfect Shape of a Circle with other Geometrical Shapes



Perfect Circle – Perfect Model for All Circles

What is a Perfect Circle?

Perfect Circle would be a Perfect Model for all the Circles in our Universe.

We have to search 'Perfect Circle'

Perfect Circle

- A Perfect Circle is a highly symmetrical 2-Dimensional shape of 360 degrees with a Perfect Circumference and Perfect Diameter with a Perfect Surface Area having both rotational and reflection symmetries and with a Perfect Constant Ratio – Pi.
- Perfect Circle does exist in Universe and Mathematics. In circle every line through the center forms a line of reflection symmetry and it has rotational symmetry around the centre for every angle. Its symmetry group is the orthogonal group O (2, R). The group of rotation alone is the circle group T. The circle is the only 2-dimensional shape with the highest area for a given length of perimeter or circumference.

Perfection is the rule of God and Universe.

180° and Half Perfect Circle
3 x 60 degrees = 180° - half degrees in a Perfect Sphere or a Perfect Circle





Cycles and Super Cycles 0° = 360°

- History Cycles
- Sports Cycles
- Arts Cycles
- Culture and Literature Cycles
- Science Cycles
- Astronomy Cycles
- Biology and Medical cycles
- Agriculture cycle

The cycles are circular in nature and everything comes to start when it completes and finishes the cycle. So **0** degrees is the start in the circle or cycle and 360 degrees is the end of the cycle or circle.

 $0^{\circ} = 360^{\circ}$

Perfect Sphere



- A sphere is a perfectly symmetrical geometrical object. This term is used in non-mathematical usage to refer either to a round ball or to its two-dimensional surface.
- In mathematics, a sphere is the set of all points in three-dimensional space (r3) which are at distance r from a fixed point of that space, where r is a positive real number called the radius of the sphere. The fixed point is called the **centre**, and is not part of the sphere itself.
- The special case of r = 1 is called a unit sphere.

Perfect Hemisphere – Half of a Perfect Sphere



12 Special Properties of a Sphere

- **1.** The points on the sphere **are all the same distant from a fixed point**. Also, the ratio of the distance of its points from two fixed points is constant.
- **2.** The contours and plane sections of the sphere are **circles**. This special property defines the sphere uniquely.
- **3.** The sphere has **constant width and constant girth**.
- **4.** All points on a sphere **are umbilics**.



6. All geodesics of the sphere are closed curves. Geodesics are curves on a surface which give the shortest distance between two points. For the sphere, the geodesics are the great circles.



12 Special Properties of a Sphere (cont..)

- **7.** The sphere is the one with the **smallest surface area** of all the solids having a given volume.
- **8.** The sphere is also the one with the **greatest volume** of all the solids having a given surface area.
- 9. The sphere has the smallest total mean curvature among all convex solids with a given surface area. The mean curvature is the average of the two principal curvatures and as these are constant at all points of the sphere then so is the mean curvature.
- **10.** The sphere has **constant positive mean curvature**. The sphere is the only surface without boundary or singularities with constant positive mean curvature.
- **11.** The sphere has **constant positive Gaussian curvature**. Gaussian curvature is the product of the two principal curvatures.
- **12.** The sphere is transformed into itself by a three parameter family of rigid motions.

(David Hilbert and Stephan Cohn-Vossen describe properties of the sphere in their book, 'Geometry and the Imagination')



There are millions of cycles in our world and universe in all spheres of life. For example, time cycles, planetary cycles, organic cycles, biological and medical cycles, physical cycles, business cycles, war cycles, literature cycle, etc. There are 2 types of Cycles:

2. Anti-clockwise Cycle

Clockwise or Anti-Clockwise Cycles

- Cycle is a complete circle. So Circles or Cycles have a significant role in our world and universe. But what are clockwise cycles and what are anticlockwise cycles?
 - Clockwise Cycle -----?
- Anti-Clockwise Cycle -----?
Clockwise Cycles

Clockwise Cycle:

A cycle which brings decline or fall or decrease or takes away protection is called a clockwise cycle.

For example, in our age cycle, our age falls with time. Our life reduces with each passing day.

There are many cycles which are clockwise like war cycle, time cycle, etc because these cycles either takes away the protection or brings decline or fall or decrease in the process or item following this cycle.

Anti-Clockwise Cycles

Anti-clockwise Cycle:

A cycle which brings rise or increase or gives protection is called an anti-clockwise cycle. For example, The electron rotates around the nucleus of the atom anticlockwise; The ovule journeying through the fallopian tube to find its way to the uterus moves anticlockwise; The earth turns around the sun anticlockwise; the moon turns around the earth anticlockwise; All planets and stars of the solar system rotate round the Milky Way galaxy anticlockwise.

The anticlockwise movement is universal, because it either gives protection or rise or increase in the process or thing following this cycle. Nature's Mathematics Vs Man-made Mathematics Nature's Mathematics:

- Mathematics is the language of nature.
- Nature shows patterns patterns of shapes, numbers, symbols, etc.
- Nature's patterns are always rational, symmetric, non-transcendental and meaningful.
- Nature's mathematics is simple, rational and symmetric.

Nature's Mathematics Vs Man-made Mathematics Man-made Mathematics:

 Man-made mathematics can be irrational, non-symmetric, artificial, transcendental, etc.

 Man-made patterns can show abstract or non meaningful shapes, numbers, symbols, etc.

 Man-made mathematics can be difficult, irrational, non-symmetric, etc.

Nature's π Vs Man-made π

Nature's π :

- Pi is a unique and most important symbol and number of our nature and universe.
- Nature's Pi should be a rational number.
- Nature's Pi must show definite pattern of perfect numbers.
- Nature's Pi should be definitely a nontranscendental number.
- Nature's Pi should show symmetry of numbers and prove the perfect symmetric shape of a circle.

Nature's π Vs Man-made π

Man-made π :

Man-made Pi is an irrational number.

- Man-made Pi is not showing any pattern of numbers.
- Man-made Pi is a transcendental number.
- Man-made Pi is not showing any kind of symmetry of numbers and not proving the symmetric shape of a circle.
- Man-made Pi is not solving major mathematical problems like squaring of a circle, rectification of a circle, etc.

Existence of a Perfect Sphere

There is **no** perfect sphere in our nature and universe **except 1** perfect sphere with perfect radius, perfect diameter, perfect circumference, perfect surface area, perfect volume and perfect Pi.

Perfection = 1 = Exception

Exception proves the law and existence of a perfect sphere.

Do Perfect Circles and Perfect Spheres Exist?

Mathematicians say:

"Perfect Circle and Perfect Sphere do not exist'.

I say:

Perfect Circle and Perfect Sphere **CO exist** in mathematics, sciences and in our Universe.

 If Perfect Circle and Perfect Sphere do exist, then what are its "Perfect Dimensions", i.e.

× Perfect Diameter.....?
× Perfect Circumference....?

So we have to search for:

» Perfect Diameter of a Perfect Circle or a Perfect Sphere
 » Perfect Circumference of a Perfect Circle or a Perfect Sphere

Perfect Diameter and Perfect Circumference

- Perfect Diameter and Perfect Circumference of a Perfect Circle or a Perfect Sphere are <u>expressed and represented</u> <u>in Numbers</u>.
- Those Numbers should be 'Perfect' in all the respects for the Perfect Circle and for the Perfect Sphere.
- So let us Search for Perfect Numbers for the Perfect Diameter and the Perfect Circumference of a Perfect circle.

Search the:

Perfect Number for Perfect Diameter of a Perfect Circle ------?

<u>Perfect Number</u> for <u>Perfect Circumference</u> of a Perfect Circle -----?

Perfect Numbers in Mathematics

• In mathematics, a **perfect number** is defined as an integer which is the sum of its proper positive divisors, that is, the sum of the positive divisors not including the number. Equivalently, a perfect number is a number that is half the sum of all of its positive divisors, or $\sigma(n) = 2 n$

The first few Perfect Numbers are:

- 6.....First and smallest Perfect Number in Mathematics
- 28 496
- **8128**

$6 = 1 \times 2 \times 3 = 1 + 2 + 3 = 6$

14 International Mathematical Claims and Discoveries

- 1. Perfect Sphere exists in the universe and mathematics
- 2. Perfect Circle exists in science and mathematics.
- 3. Perfect Circle can be 'Squared Quadrature' is possible.
- 4. Perfect Sphere can be 'Cubed.'
- 5. Rectification of the Perfect Circle is possible i.e. the circumference can be drawn as a straight line.
- 6. Pi is a rational and real number and ratio of two real perfect integers.
- 7. Pi is a normal number and shows a regular pattern of decimal expansion of only one number.

14 International Mathematical Claims and Discoveries (Cont..)

- 8. Pi is normal to base 10 with unique infinite decimal expansion ending with recurring decimal.
- 9. Pi is a perfect and exact mathematical number
- **10.** Pi is a symmetrical and flawless number.
- 11. Pi is a plane solution to a geometry problem.
- **12.** Pi is a unique and independent number.
- **13.** Pi is a natural and definite number.
- 14. Pi is a universal constant number.

Simplicity is the key of Pi

"The British Association for the Advancement of Science may assume infallibility and authoritatively proclaim that the solution of the problem is impossible; and may consequently decline to permit the consideration of the subject to be introduced into their deliberations......And yet, the solution of the problem is extremely simple after all. It would almost appear as if its very simplicity had been the grand obstacle which had hitherto stood in the way of its discovery......I have subjected my theory to every conceivable test, both mathematical and mechanical, with an honest determination to find a flaw if possible; and having failed to do so, I now unhesitatingly propound it, as the true theory on this important question."

James Smith, The Quadrature of the Circle, 1861



Perfect Diameter of Ali Pi

6 - First Perfect Number in Mathematics

6



Number 6 – a Perfect Number in the eyes of Greek Mathematicians

Number – 6 is a Perfect Number in the eyes of Greek Mathematicians because 6 equals the sum of its divisors that are smaller than itself. Such a number is neither 5 nor 7 nor 10, but 6 for the reason:

6 = 1 + 2 + 3

 $6 = 1 \times 2 \times 3$

6 = 6

3 x 3 Magic Square of 6



All rows, columns and diagonals add to ${f 6}$



Number – 6 is the 1st and Smallest Perfect Number.

- Number 6 is the 1st Unitary Perfect Number.
- Number 6 is the multiply perfect Number.
- Number 6 is a hyper-perfect number.
- Number 6 is the semi-perfect Number.
- Number 6 is a primitive semi-perfect or primitive pseudo-perfect Number.

Number – 6 is the One and Only Number in Mathematics which is 'Perfect' in all aspects and dimensions

Г	Number – 6				
Г	Cardinal	6 (six)			
Г	Ordinal	6 th (sixth)			
F	Numeral system	Senary			
	Factorization	2.3			
	Divisors	1,2,3,6			
	Roman numeral	VI			
	Roman numeral (Unicode)	VI, vi			
	Japanese numeral	六			
	prefixes	hexa-/hex- (from Greek) sexa-/sex- (from Latin)			
	Binary	110			
	Octal	6			
	Duodecimal	6			
	Hexadecimal	6			
	Hebrew	ı (Vav)			

Significance of Number – 6

- 1. 6 is a Centered Pentagonal Number.
- 2. 6 is a Schroder Number.
- 3. 6 is a Pentagonal Pyramidal Number.
- Number 6 can be partitioned in 11 different ways.
- 5. 6 is the total number of parts in all Partitions of 3.
- 6. The Tetrahedron is a Platonic solid with 6 solids.
- 7. The Octahedron is a Platonic Solid with 6 faces.



Hexagonal cake box

6 + 1, 6 x 66 + 1, and 6 x 66 x 666 + 1 are primes.

Significance of Number – 6

- 8. In base 10, 6 is a 1 automorphic number.
- 9. 6 is one of the four all-Harshad numbers.
- **10.There are 6 convex regular polytypes in four directions.**
- 11. The smallest non-abelian group is the symmetric group S3 which has 3!= 6 elements.
- **12.** 6 is a harmonic divisor number.
- 13. 6 is a highly composite number.
- 14. 6 is an octahedral number
- 15. 6 is also a triangular number and so its square 36.

6 – Smallest Number

6 is the smallest number which is the product of two distinct primes.



Both 2 and 3 are Prime Numbers.

6 - Only Perfect Number

6 - The only perfect number that can be sandwiched between twin primes.



Where 5 and 7 are Prime Numbers.

Perfect divisibility of Six - 6

The number 6 was believed perfect for being divisible in a special way:

`A sixth part of that number constitutes unity; a third is two; a half -- 3; two thirds (Greek: dimoiron) is four, five-sixths (pentamoiron) is five; six - 6 is the perfect whole `

6 and Equilateral Triangle 6 equal sides of 2 equilateral triangles with equal 60 degrees angles

Equilateral triangle:

"An equilateral triangle having **60 degrees** from all the sides should have three **equal sides**"

And 2 equilateral triangles of 60 degrees each would have 6 equal sides, which correspond to 360 degrees

60 degrees x 3 equal sides of `a' corresponds to 180 degrees

60 degrees x 6 equal sides of `a' corresponds to 360 degrees

360 degrees makes a complete 'perfect circle or a sphere' which would have 6 equal divisions of 60 degrees each

6 x 60 degrees = 360 - total degrees in a Perfect Sphere or a Perfect Circle





Equilateral Triangles

Only 6 - Trigonometric Functions

Function	Abbreviation	
Sine	sin	
Cosine	COS	
Tangent	tan	
Cotangent	cot	
Secant	sec	
Cosecant	cosec	

Six – 6 Trigonometric Functions

Trigonometric functions: Sine, Cosine, Tangent, Cosecant, Secant, Cotangent

6 and Time

Six - 6 is the root number of time in our Universe and life.

60 seconds = 1 minute = 6 + 0= 6 60 minutes = 1 hour= 6 + 0= 6 24 hours = 1 day= 2 + 4= 6 366 days = 1 leap year = 3 + 6 + 6= 15 = 1 + 5 **=** 6

Carbon- Atomic Number -6

The chemical element 'Carbon' has an atomic number of 6.

Carbon – Most important element atomic number – 6

Only 6 – Noble Gases

There are only 6 Noble Gases in Chemistry.

The Noble gases are the elements in Group – 18 of the Periodic Table. They are:

Helium
 Neon
 Neon
 Argon
 Argon
 Krypton
 Xenon
 Radon



Quarks and 6

 Quarks are the only fundamental particles that interact through all four of the fundamental forces.

Quarks come in ----- 6 flavors

- **1.** Up
- 2. Down
- 3. Charm
- 4. Strange
- **5.** Top
- 6. Bottom



- In particle physics, the quark is one of the two basic constituents of matter, the other is the lepton.
- Antiparticles of quarks are called anti-quarks.
- In every proton or neutron, there are exactly 3 quarks each.

6 and Kissing Number Problem

Only Number 6 - Answer to Kissing Number Problem in 2-Dimensions



Perfect Circle in 6 Sectors

$6 \times 60^{\circ} = 360^{\circ}$



6 x 6 Apocalyptic Magic Square ---666

3	107	5	131	109	311
7	331	193	11	83	41
103	53	71	89	151	199
113	61	97	197	167	31
367	13	173	59	17	37
73	101	127	179	139	47

A beastly 6 x 6 magic square of Prime Numbers invented by A.W. Johnson – published in the Journal of Recreational Mathematics.

Each row, each column and each diagonal and broken

diagonal sum to ----- 666

6 and its magical applications 6 x 66 x 666 x 6666 x 66666 x 66666 + 1

is a prime number.

Most Successful Management Book:

Six Sigma

By: Mikel Harry, PHD & Ricahard Schroeder

Sexy Primes and 6 Sexy Primes are such that n and n + 6 are both prime. 'Sexy' comes from the Latin for 'Six' – 6

Sexy Primes are either of the form

6n + 1 or 6n -1
Division of Prime Numbers by 6

Every Prime Number except for 2 and 3 will eventually become divisible by Number – 6 if you either add or subtract 1 from the number.

3 x 3 Magic Square of 6



All rows, columns and diagonals add to 62 + 2 + 2 = 6

2 --- First and Only Even Prime Number

6 and Insects

All insects have Six – 6 legs



6 – Hexagonal Cells and Bees

Pappus discussed the practical intelligence of bees in constructing hexagonal cells with **6** equal sides. He concluded that bees knew that a hexagon with 6 equal sides, using the same material, would hold more than the other shapes.

Pappus, claiming that man has a greater share of wisdom than the bees, then showed that of all regular figures with equal perimeter, the one with the larger number of sides has the larger area, the circle being the limiting maximum.

6 and Human Vertebrae

A normal human spine has 33 vertebrae when the bones that form the coccyx are counted individually.

33 = 3 + 3

6

6 – Bones in the Middle Ears

The number of bones in the middle ears - six (6).

malleus - 2 bones.
incus - 2 bones.
stapes - 2 bones.

A total of 6 bones

6 and its Reversal 9



six - nine is the shape of a child in mother's womb.



6 months baby

6 and 9

6 is the binary complement of Number – 9

6 ---- 0110

9 ---- 1001

6 and Perfect Vision

6/6 is considered as the 'Perfect Vision' of a human eye.



Only 6 Senses In Humans

Taste
Hearing
Vision
Vision
Touch
Smell
6. 6th Sense

6 Degrees of Separation

Six – 6 degrees of separation refers to the idea that, if a person is one "step" away from each person he or she knows and two "steps" away from each person who is known by one of the people he or she knows, then everyone is no more than six "steps" away from each person on Earth. Hence, six degrees of separation is somewhat synonymous with the idea of the "small world" phenomenon.

6 Development Phases in Human Birth

Only **Six - 6** development phases in human birth from the development of human embryo to human birth as per modern medical research

6 Feet Under

The number of feet below ground level a coffin traditionally buried is 6.

The phrase "six feet under" means that a person (or thing, or concept) is dead.

Only 6 Dimensions

North
South
East
West
Earth (Center)
Heaven (Space)

Only 6 Relationships in the World and Mathematics

Greater than. (>)
Less than. (<)
Equal to (=)
Not Equal to (=)
Greater than Equal to.(>=)
Less than Equal to. (<=)

Perfect Triangle - 60° Perfect Circle – 6 x 60°



4 x 4 Magic Square of 60

14	17	17	12
14	14	14	18
14	16	16	14
18	13	13	16

All rows, columns and diagonals add to ${\bf 60}$

Only Six – 6 Directions



Only 6 Inhabited Continents

The number of inhabited continents on earth are only Six – 6

Europe
Africa
Australia
Australia
North America
South America
Asia

Only 6 Major Climates

There are six - 6 major climate types on our earth

Moist Tropical Climates.
Dry Climates.
Humid Middle Latitude Climates.
Continental Climates.
Cold Climates.
Highland Climates.

6 and Astronomy

- Messier object M6, a magnitude 4.5 open cluster in the constellation Scorpius, also known as the Butterfly Cluster.
- The New General Catalogue object NGC 6, a spiral galaxy in the constellation Andromeda.
- The <u>Saros</u> number of the solar eclipse series which began on -2691 March 16 and ended on -1393 May 3. The duration of Saros series 6 was 1298.1 years, and it contained 73 solar eclipses.
- The Saros number of the lunar eclipse series which began on -2642 July 25 and ended on -1091 February 10. The duration of Saros series 6 was 1550.6 years, and it contained 87 lunar eclipses.
- The Roman numeral VI stands for subdwarfs in the Yerkes spectral classification scheme.
- The Roman numeral VI (usually) stands for the sixthdiscovered satellite of a planet or minor planet (e.g. Jupiter VI).

Only Six – 6 Questions in our Universe

 Six – 6 is a 'Universal Perfect Number' of our universe, life, time and space because there are only six – problems or questions or answers to any knowledge in our universe, life, time and space.

The Only Six – 6 Questions in our Universe are:

- What
- Why
- When
- Where
- Who
- How

There is no other question to be asked in any science or mathematics or any knowledge in our Universe. So with 6 questions, there should be 6 answers.

6 – Questions 6 – Answers

Greek - Hexa and 6

Hexa is Greek for "six". Thus:

- A hexahedron is a polyhedron with 6 faces, with a cube being a special case
- An hexagon is a regular polygon with 6 sides
 - L' Hexagone is a French nickname for the continental part of France
- A hexapod is an animal with 6 legs; this includes all insects
- Hexameter is a poetic form consisting of 6 feet per line
- "Hexadecimal" combines hexa- with the Latinate decimal to name a number base of 16
- A "hex nut", of course, is a nut with 6 sides, and a hex bolt has a 6 sided head.

Latin - Sex and 6

Sex- is a Latin prefix meaning "six". Thus:

- A group of 6 musicians is called a sextet.
- 6 babies delivered in one birth are sextuplets. The first set of sextuplets of whom all six survived are the Dilley sextuplets.
- People with sexdactyly have 6 fingers on each hand

The measuring instrument called a sextant got its name because its shape forms one sixth of a whole circle.

6 and Magic Square of 15



Add from any side, diagonally or straight from up to down or from left to right or other wise and the answer would be Number -15. The root number of 15 is 1 + 5 = 6.

Cube with 6 faces

The Cube is a Plutonic Solid with 6 faces



6 x 6 x 6 = 216 ■ Pythagoreans considered 216 to be a mystical number, because it is 6 cubed. (6 x 6 x 6)

 6 was also considered a 'Circular number' because its powers always ended in 6.

$216 = 6^3$

6 is the difference between 2 powerful numbers:

 $6 = (5^4)(7^3) - (463)^2$

666 and 666,666

- 666 ----- 36th Triangular number
- 666th Triangular number = 222,111
- 222,111 ----- (2 + 2 + 2) --- (1 + 1 + 1) 222,111 ----- 6 - 3 ---- 63
- 222,111 when divided by (1 + 36 = 37) gives:

222,111/37 = 6003

- 63 ----- is the reversal of 36
- There exists only one Pythagorean triangle 693 – 1924 – 2045 whose area is:

666,666

6 and Only Finite Symmetric Group with Automorphism

S6 with 720 elements is the only finite symmetric group which has outer automorphism.

- The Unique equation:
 - $x^3 + y^3 + z^3 = 6xyz$ has a unique solution

x = 1, y = 2 and z = 3

[Acta Arithmética v73, 201]

6 – Lucky Number Number – 6 is the 'Lucky Number' of Chinese.

$6 = \sqrt{1^3 + 2^3 + 3^3}$

There are 6 regular polytypes

The Pythagoreans associated 6 with marriage and health. It also stood for equilibrium, symbolized by 2 triangles, base to base.

Only 6 tastes of Indian Medicine Ayurveda

The number of tastes in traditional Indian Medicine called Ayurveda are SiX - 6.

Sweet
Sour
Salty
Bitter
Pungent
Astringent

4 x 4 Magic Square of 6



All rows and columns add to **6** using only 1 and 2

Perfect Role of Six – 6 in Religions and Cultures

'These works are recorded to have been completed in **six** days....because six is a perfect number.....because the perfection of the works was signified by the number **six**. For the number six is the first to be made up of its own parts, i.e., of its sixth, third and half, which are respectively one, two and three, and which make a total of six.'

(St. Augustine)

6 and Sextant

Sextant – 1/6th of the Whole Circle

The measuring instrument called a sextant got its name because its shape forms 1/6th of a whole circle.

Six – in Cricket

In cricket, a 'Sixer' is a shot in which the ball clears the boundary without bouncing scoring six - 6 runs.


Just Six - 6

 Pascal discovered in 1640 AD at the age of 16, his theorem of the Mystic Hexagon.

'If any **6** points are chosen on a conic section, labelled 1,2,3,4,5,6, then the intersection of the lines 1-2 and 4-5, 3-4 and 6-1, 5-6 and 2-3, will lie on a straight line.'

Brianchon enunciated the dual theorem, in which the original points are replaced by of tangents to the conic.

A Remarkable Book by

Martin J. Rees

Just Six Numbers: The deep forces that shape the Universe

6 and Dice

Only 6 Numbers on the Playing Dice.

There are only six - 6 numbers on the playing dice, which we use to play for different games.

1, 2, 3, 4, 5, 6, ---- Six - 6 numbers on the playing dice



6– Perfect Universal Mathematical Number



6 - Universal and Mathematical Perfect Number

God and Nature's Perfection in the Universe - 6



Is the God and Nature's Perfection in the Universe

Twelve - 12 and Perfect Circle

- Twelve is the kissing number in three dimensions.
- It is possible to construct a perfect circle divided into 12 sectors of 30 degrees each using a compass and straightedge.

12 = 6 + 6

Steps to make a Perfect Circle

- **1.** Using a compass, construct a simple circle.
- 2. Taking care not to change the radius setting, draw a second circle with center anywhere on the perimeter (circumference) of the first.
- **3.** Now go to the two points where the second circle crosses the first and draw two more circles from these centers.
- **4.** Continue this process to draw the final three circles working your way around the perimeter (circumference) of the first.

5. Finally connect the center of the original circle with all other points of intersection using a straight edge.
 You now have twelve (12) radial lines emanating from the center separated by twelve (12) - 30 degree sectors, all constructed from 7 equal sized circles.

360 Degrees and Number - 36

360 Degrees of a Perfect Circle or a Perfect Sphere

 $\bullet 360 = 36 \times 10 = 6 \times 6 \times 10 = 360$

3 Numbers Below - 6

- There are 3 Odd Numbers below Number 6, i.e.
 1, 3, 5.....
 - There are **3 Prime Numbers** below Number 6, i.e. 2, 3, 5.....
- There are 3 Even Numbers below Number 6, i.e.
 0, 2, 4.....

3 is below 6.....36



Number – 3 and Perfect Fraction of 1/6 to get Number – 6

6 = 3/(1/6 + 1/6 + 1/6)= 6

 So if we divide the Number – 3 with the sum of three 'Perfect fraction' of 1/6, we would get 'Perfect Universal and Mathematical Number – 6.'

1/6 - Perfect Fraction of two Perfect Numbers of 1 and 6

Special link between Numbers 3 and 6

There is a special link between Numbers – 3 and 6

3 + 3 = 6 3 x 2 = 6 6 - 3 = 3

- If we write 6 upside down, it will become 9
- The difference between 9 and 6 is also 3

And also:

- There are 3 Odd Numbers below Number 6, i.e. 1, 3, 5.....
- There are 3 Prime Numbers below Number 6, i.e. 2, 3, 5.....
- There are 3 Even Numbers below Number 6, i.e. 0, 2, 4.....

Also:

360 Degrees ----- 3 - 6 - 0

Secrets of 3 and 6 in 360° 360°

3 - Perfect Radius of a Perfect Circle
6 - Perfect Diameter of a Perfect Circle
O - Perfect Circumference - ?

Definition of 3

3 is the Perfect Constant Radius of a Perfect Circle or Perfect Sphere or Perfect Sphere of Expanding Universe

Perfect Radius



Perfect Radius of a Perfect Circle

3

6 – GOD and Nature's Perfection

God's Perfection in the Universe



Definition of Six - 6

The Number - 6 is the Universal Mathematical Perfect Constant Number and the Perfect Constant Diameter of a Perfect Circle or a Perfect Sphere or a Perfect Expanding Spherical Universe.

Perfect Diameter



Perfect Diameter of a Perfect Circle

6

Phase 4

Perfect Circumference of Ali Pi

1-Start 9-End

 Nineteen - 19 encompasses the first numeral – 1 and the last - 9 numeral

 One (1) -- Start of every thing, Origin, Unity, Unique, etc

 Nine (9) -- End of everything, Destination, Final, Last etc

19

Number – 19							
Cardinal	19 (nineteen)						
Ordinal	19 th (ninteenth)						
Factorization	Prime						
Divisors	1,19						
Roman numeral	XIX						
Roman numeral (Unicode)	XIX, xix						
Binary	10011						
Octal	23						
Duodecimal	17						
Hexadecimal	13						

4 x 4 Magic Square of 19



All rows, columns and diagonals add to ${f 19}$

Significance of 19 in Mathematics

- **1.** The Rhind Papyrus contained a problem to find x so that x plus one seventh of it will equal the prime number **19**.
- 2. String of the first ten odd integers, from 1 up to 19, is a prime (135791113151719).
- 3. There are exactly 19 primes beginning with the digit 2 among primes smaller than one thousand.
- 4. 19 is the largest prime factor of 1444 the smallest perfect square to end in three 4's. Note that 4 is the only non-zero digit that can repeat at the end of a perfect square, and the most consecutive 4's that can appear in such a place is three.
- 5. Number 67 is the **19th** Prime number.
- 6. Professor Barabasi and his team have found that the World Wide Web on average has 19 clicks of separation between web pages.

1st Prime Number – Digital Root is 1



19 is the **first and the smallest** Prime Number with a digital root of **1**.

19 = 1 + 9 = 10 = 1 + 0 = 1

19 As a Prime Number

- (1111 x 111)^11 + 111111111 + 1 (19 ones) is a prime number.
- 19 is the first prime resulting from the sum of cubes of distinct fractions using only primes, i.e.,

 $19 = (5/2)^3 + (3/2)^3$.

 Inserting 17 zeros between the two digits of 19 makes another prime of exactly 19 digits. Note that 17 and 19 are twin primes.

100000000000000009.....Prime Number with 17- Zero's in between 1 and 9.

19 - Only Prime Number 19 ----- |1 - 9|th prime number

19 ----- |9 - 1|th prime number

(19^19 - 2^19)/ (19 - 2) is a prime number

 12 trees can be planted in an orchard to create 19 rows of 3 trees each. It is conjectured that the maximum number of 3-rows is also 19 for 13 trees.

19 - Smallest Prime Number

1. The smallest prime that is equal to the product of its digits plus the sum of its digits $(1 \times 9) + (1 + 9) = 9 + 10 = 19$

2. 19 is the smallest prime whose reversal is composite
 91 - Composite number = 13 x 7 = 91

3. The only prime which is equal to the difference of two prime cubes. $(3)^3 - (2)^3 = 27 - 8 = 19$

4. 19 is the smallest two-digit number such that **19**¹**9**+**19**-**1** is prime

- 5. 19 is the smallest prime with a digital root of 1
- 6. 19 is the only known number for which both (10^n-1)/9 and (10^n+1)/11 are primes

7. 19 is the smallest prime equal to the product of Twin primes plus their arithmetic mean

$$(3 \times 5) + 4 = 19$$

19 - Smallest Prime Number

19 is the smallest prime which is the sum of **3** discrete primes

3 + 5 + 11 = 19

19 – 8th Prime Number and Number - 27

19 – 8th Prime Number

19 + 8 = 27

The root number of Number – 27 is Number – 9 as:

27 = 2 + 7 = 9

Also if 1 degree = 1/360 = 0.0027 777......

The first two numbers of the value of 1 degree is also Number – 27

Relationship between 19 and the Perfect Numbers

19 is the smallest Prime number with a digital root of Number – 1.

19 = 1 + 9 = 10 = 1 + 0 = 1

 All the Perfect Numbers have a digital root of Number – One -1 except the First and the smallest Perfect Number – 6

28 = 2 + 8 = 10 = 1 + 0 = 1 496 = 4 + 9 + 6 = 19 = 1 + 9 = 10 = 1 + 0 = 18128 = 8 + 1 + 2 + 8 = 19 = 1 + 9 = 10 = 1 + 0 = 1

And so on

- So 19 is basically representing all the Perfect Numbers as a root number of all Perfect Numbers except Number – 6 which is the smallest and the first Perfect Number
- 19 = 1.....root number of all Perfect numbers except Number 6
- 19Representing all Perfect Numbers in Mathematics except Number – 6.

Perfect Numbers and 19

$$496 = 2^{4}(2^{5} - 1) = 1 + 2 + 3 + \dots + 29 + 30 + 31 = 1^{3} + 3^{3} + 5^{3} + 7^{3}$$

 $8128 = 2^{6}(2^{7}-1) = 1 + 2 + 3 + \dots + 125 + 126 + 127 = 1^{3} + 3^{3} + 5^{3} + 7^{3} + 9^{3} + 11^{3} + 13^{3} + 15^{3}.$

• 496 and 8128 are 3rd and 4th Perfect Numbers.

496 = 4 + 9 + 6 = 19

8128 = 8 + 1 + 2 + 8 = 19

• The 5th Perfect Number is 33550336

• The root number of perfect number 33550336 is also Number 19 as

33550336 = 33 + 55 + 03 + 36= 127 = 12 + 7 = 19

• The 6th Perfect Number is 8589869056

The root number of perfect number 8589869056 is Number – 19 as:
 8589869056 = 858 +986 + 90 + 56

= 1990 = 19 + 90 = 1 + 9 + 9 + 0 = 19

19 = 1.....root number of all Perfect numbers except Number - 6 **19**Representing all Perfect Numbers except Number - 6.



Super Cycle – 19 x 19

$361 = (19 - 0) \times (19 + 0) = 361$

$361 = 19 \times 19$

Super Cycle – 19 x 19

$1^2 + 2^2 + 10^2 + 16^2 = 361$

$6^2 + 10^2 + 15^2 = 361$

$6^2 + 9^2 + 10^2 + 12^2 = 361$

$19^2 = 361$

4 x 4 Magic Square of 361

86	<mark>96</mark>	97	82
91	88	87	95
86	94	92	89
98	83	85	95

All rows, columns and diagonals add to ${f 361}$

1/19 and Cyclic Number

A Cyclic number – C is an integer that – when multiplied by any number from 1 to the number of digits of 'C' – always contains the same digits as 'C'. Also, these digits will appear in the same order but begin at a different point.

1/19 = 0.052631578947368421 produces a

Cyclic Number - 52,631,578,947,368,421

Magic square of decimals of 1/19, 2/19,3/19,.....18/19 yielding 81 in all directions

0	5	2	6	3	1	5	7	8	9	4	7	3	6	8	4	2	1
1	0	5	2	6	3	1	5	7	8	9	4	7	3	6	8	4	2
1	5	7	8	9	4	7	3	6	8	4	2	1	0	5	2	6	3
2	1	0	5	2	6	3	1	5	7	8	9	4	7	3	6	8	4
2	6	3	1	5	7	8	9	4	7	3	6	8	4	2	1	0	5
3	1	5	7	8	9	4	7	3	6	8	4	2	1	0	5	2	6
3	6	8	4	2	1	0	5	2	6	3	1	5	7	8	9	4	7
4	2	1	0	5	2	6	3	1	5	7	8	9	4	7	3	6	8
4	7	3	6	8	4	2	1	0	5	2	6	3	1	5	7	8	9
5	2	6	3	1	5	7	8	9	4	7	3	6	8	4	2	1	0
5	7	8	9	4	7	3	6	8	4	2	1	0	5	2	6	3	1
6	3	1	5	7	8	9	4	7	3	6	8	4	2	1	0	5	2
6	8	4	2	1	0	5	2	6	3	1	5	7	8	9	4	7	3
7	3	6	8	4	2	1	0	5	2	6	3	1	5	7	8	9	4
7	8	9	4	7	3	6	8	4	2	1	0	5	2	6	3	/1	5
8	4	2	1	0	5	2	6	3	1	5	7	8	9	4	7	3	6
8	9	4	7	3	6	8	4	2	1	0	5	2	6	3	1/	5	7
9	4	7	3	6	8	4	2	1	0	5	2	6	3	1	5	7	8

4 x 4 Magic Square of 81

16	26	27	12
21	1 8	17	25
16	24	22	19
28	13	15	25

All rows, columns and diagonals add to 81100 - 19 = 81 and 81 + 19 = 100


3 x 3 Magic Square of 19 - 1



All rows, columns and diagonals add to 19 - 119 - 1 = 18

3 x 3 Magic Square of 19 + 1



All rows, columns and diagonals add to 19 + 119 + 1 = 20

4 x 4 Magic Square of 19 + 1



All rows, columns and diagonals add to 19 + 119 + 1 = 20

Waring's Problem and 19

 Warring conjectured in 1770 that every positive integer can be expressed as a sum of 19 biquadrates (fourth powers). This was later proven by Bal Subramanian, Deshouillers, and Dress.

 Every positive integer is the sum of at most 19 fourth powers.

Multiply 19 with 19 - 19 times

 When we multiply Number – 19 with Number – 19, 19 times, we get a number

= **19**.78419656 x (10 ^ 23)

The first two numbers of the result is also Number – 19

The sum of the next three numbers – 784 is also 19 as:

7 + 8 + 4 = 19

The next two numbers is Number – 19

19 is the 8th Prime Number

A **prime number** is an integer that is not divisible without remainder by any other integer

except 1 and that integer itself.

The order of Prime Numbers	1	2	3	4	5	6	7	8
The Prime Numbers	2	3	5	7	11	13	17	19

 $19 - 8^{\text{th}} \text{ Prime Number}$ $19 \text{ is the 8}^{\text{th}} \text{ Prime Number}$ 19 + 8 = 27

And $27 = 3 \times 3 \times 3 ----$ all are perfect.

Product of first 8 primes + 1 is: 2x3x5x7x11x13x17x19 + 1 = 9699691 9699691 = 347 x 27953 ...Product of 2 Primes 3 – Perfect Constant Radius of a Perfect Circle or Sphere

19 and Amazing Formula 19 ----- 8th Prime Number 19 + 8 = 27 = 9 + 9 + 9 $100 - 19 = 81 = 9 \times 9$ $27 \times 81 = 2187$ $270 \times 810 = 2187,00$ $2700 \times 8100 = 2187,0000$ $27000 \times 81000 = 2187,000000$ and so on.

Divine Table of Eight - 8

1 x 8 + 1 = 9
12 x 8 + 2 = 98
123 x 8 + 3 = 987
1 234 x 8 + 4 = 9 876
12 345 x 8 + 5 = 98 765
123 456 x 8 + 6 = 987 654
1 234 567 x 8 + 7 = 9 876 543
12 345 678 x 8 + 8 = 98 765 432
123 456 789 x 8 + 9 = 987 654 321



"Omnia apud me mathmatica fiunt: With me everything turns into mathematics."

Descartes

8 and Infinity

8 is the only number in mathematics which is used to represent Infinity

The infinity symbol "∞"

Beauty of Eight - 8

 $>9 \times 9 + 7 = 88$ $>98 \times 9 + 6 = 888$ **>987 x 9 + 5 = 8888** >9876 x 9 + 4 = 88888 $>98765 \times 9 + 3 = 8888888$

Numbers – 19 and 16 if written upside down

 If the Number – 19 is written upside down, it would become Number -16, which contains both the Perfect numbers of 1 and 6 as Number -1 would not change if written upside down



 The Numbers 1 and 6 are Perfect Numbers and if we add these two Perfect Numbers, we would get another Perfect Eternal Number – 7

7 = 1 + 6...Sum of Perfect Numbers

9 = 3 + 6Radius + Diameter

1 - 9 and Prime Numbers

The following are primes:

19, 109, 1009, 10009

No other digit can replace the 9 and yield four primes.

[Source: NUMBERS: Fun & Facts by J. Newton Friend; Charles Scribner's Sons, New York (1954); Library of Congress Catalog No. 54-8690, p. 45]

First Prime Number – 19

The first prime p such that p^2 is the reversal of a prime - 163

361 is the reversal of the prime number – **163**

$19 ^ 2 = 361$

361 --- 163

163 ---- **38th** Prime Number----**19** + **19** = **38**

First 1000 Prime Numbers and 19

There are only 27 Prime Numbers in the first 1000 Prime Numbers which end in Number – 19.

19,419,619,719,919,1019,1319,1619,2719,2819,3019, 3119,3319,3719,3919,4019,4219,4519,4919,5119,5419, 5519,6619,6719,7019,7219,7919.

7919 is also the 1000th Prime Number

19 is the 8th Prime Number

19 + 8 = 27

27 Prime Numbers in first 1000 Prime Numbers

19 and the Security Code

- 19 is the Prime Number, i.e. 19 can be divided only by itself and by 1.
- Prime Numbers are mostly the preference of intelligence services, banks, security companies, financial institutions, etc to form a security code.
- If the security code is a composite number, then it would be debatable whether the security code is formed by that composite number or its multiples.
- For example, the multipliers of 21 are 7 and 3. If the number 21 is taken as security code, then it would be questioned which number form the security code, since every number that is a multiple of 21 is a multiple of 7 and 3. So Number – 19 fulfills the requirement of a 'Security Code.'

$190 = 19 \times 10$

1+2+3+4+5+6+7+8+9+10+11+12+13+14+ 15+16+17+18+19 =

190

If we add the first 19 numbers from 1 to 19, the result would be Number – 190 which is a multiple of 19



4 x 4 Magic Square of 490

118	128	129	115
123	121	120	126
119	125	124	122
130	116	117	127

All rows, columns and diagonals add to **490 19 can be Partitioned in 490 ways**

Combination of Number -19 and its reversal – 91 If we write 19 and 91 together, we see:

19 – 91 ---- 1991

$1991 = 11 \times 181$

11 --- 5th Prime Number 181 --- 42nd Prime Number

110 = 19 + 91

110 is the sum of Numbers – 19 and 91.

The reversal of 19 is 91.

6 is written as **110** in binary system

3 x 3 Magic Square of 110

36	41	33
34	37	<mark>39</mark>
40	33	<mark>38</mark>

All rows, columns and diagonals add to 11019 + 91 = 110

19 ----- 8th Prime Number 19 x 8 = 152

152......77th Even Number

77......7 + 7 = **14**......**8**th Even Number

152.....1 + 5 + 2 = 8 -----and **19** is the 8th Prime No.

152.....1 – 52-----52.....27th Even Number

19 ----8th Prime Number -----19 + 8 = 27

 $152....15-2....15 \times 2 = 30$

30.....19th Composite Number

15......8th Odd Number-----19 is the 8th Prime No.

19 ----- 8^{th} Prime Number 19 - 8 = 198

198 ----- 100th Even Number

100 ----- means 'Perfection' and 'Completion'

19-8 ----- means 'Perfection' and 'Completion'

19 and Enneadecagon

• In geometry, an enneadecagon is a polygon with 19 sides and angles.

• It is also known as an enneakaidecagon or a Nona decagon.



Rule of Divisibility by 19

- The mathematical code to determine if a number is divisible by 19. Multiply everything in front of the last digit by nine - 9 and subtract the last digit. If you get zero, nineteen, or a multiple of nineteen, the number will be divisible by 19. For example 57. Five times nine minus seven equals 38. Since 19 divides evenly into 38, it divides evenly into 57. Next example 114. Eleven times nine minus four equals 95. Since 19 divides evenly into 95, it divides evenly into 114.
- Professor Barabasi and his team have found that the world wide web on average has 19 clicks of separation between web pages.

Number 19, 8 and 36

19 is the 8th Prime Number

19 + 8 = 27

If we add the numbers from 1 to 8, we would get

36 = 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 = 36

- $36 \times 10 = 360$
- 19 x 10 = 190....The sum of 19 numbers from 1 to 19
- 360 = The sum of first 26 numbers + (3 + 6)

 $360 = (1 + 2 + 3 + \dots + 24 + 25 + 26) + (3 + 6)$ = 360

- 26 = 2 + 6 = 8..... 19 is the 8th Prime Number.
- 36 = 3 + 6 = 9 = 3 (Radius) + 6 (Diameter) = 9
- If we add first 36 numbers from 1 to 36, we would get:

 $666 = 1 + 2 + 3 + \dots + 34 + 35 + 36 = 666$

Famous Hardy and Ramanujan Number – 19 x 91

19 x 91 = 1729 ...Famous Hardy and Ramanujan Number

1729 = 1 + 7 + 2 + 9 = 19 $1729 = 1^{3} + 12^{3} = 9^{3} + 10^{3}$ 19 + 91 = 110

In binary number system – Number – 6 which is the first and the smallest perfect number is written as 110.

Twelve - 12 and Perfect Circle

"It is utterly impossible for one to accomplish the work in a physical way; it must be done metaphysically and geometrically, not mathematically. When approached in this manner, the problem is easy of solution. It is stated by occultists that the number 12 squares the circle and it is necessary to take into consideration the process before we can understand this; when correctly understood we know it to be perfectly true."

> A. S. Raleigh, Occult Geometry, 1932 Reference: The Joy of Pi, David Blatner, Pg:102

It is possible to construct a perfect circle divided into 12 sectors of 30 Degrees each using a compass and straightedge.

12 ----- 7th Even Number (0,2,4,6,8,10,12,....)

6 --- 1st and Smallest Perfect Number---Perfect Diameter 19 ----Perfect Circumference of a Perfect Circle

Number -30 is the 19th composite

 Composite number is a number of whose factors can be separated. The first 19 composite numbers are:

4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20, 21, 22, 24, 25, 26, 27, 28, **30**.....

So Number – 30 is the 19th composite number in mathematics

30° x 12 = 360° ---- Total Degrees of a Circle.



Degrees and Circle

Centre

Radie

It is possible to construct a perfect circle divided into 12 sectors of 30 degrees each using a compass and straightedge.

360 degrees = 12 x 30°

= 360° = perfect circle

Circle of the Elliptic and 30

Astrologers divide the circle of the elliptic into twelve (12) equal

sections of 30 degrees each. The first starts at the point where the Earth's equator, projected into space, crosses the plane of the elliptical on 21 March - the Vernal or Spring Equinox. This is the first day of the Aries, the first sign of the Zodiac. Each of the sections is allocated one of the Zodiac signs. People born under each sign are ascribed the characteristics identified with their sign.

$12 \times 30 = 360^{\circ}$ and Number - 19

Number – 12 is the 7th Even Number

0,2,4,6,8,10,**12**,.....

12 + 7 = 19

Number – 30 is the 19th composite number in mathematics

4, 6, 8, 9, 10, 12, 14, 15, 16, 18, 20, 21, 22, 24, 25, 26, 27, 28, **30**.....

30 x 12 = 360° ---- Total Degrees of a Perfect Circle.

5 – Platonic Solids and 19

There are 5 Platonic Solids.

- The five 5 platonic solids + the 13 Archimedean Solids + the surrounding Sphere
 = 19.
- The sum of all the points, lines and faces of the 5 platonic solids totals – 190.

$190 = 19 \times 10$

The total number of corners of all the platonic and Archimedean Solids is 608

$608 = 19 \times 32$

 The total number of edges + the total number of faces of all the platonic and Archimedean Solids is 1482

$1482 = 19 \times 78$

Solid	v	е	f
Cube	8	12	6
Dodecahedron	20	30	12
Icosahedron	12	30	20
Octahedron	6	12	8
Tetrahedron	4	6	4

Dr. Peter's Book – 'God's Secret Formula' and 19

The mystery of 19 according to the theories of Peter Plichta as set out in his book "God's Secret Formula" is described as:

He says:

" I understand that nature strictly divided the stable elements according to the type of their divisibility in four nineteenth columns. It assigned a twentieth number to each of the four categories, that stands in the table over this nineteen numbers, without violating the 'Nineteen rule' which regulates the divisibility. The coding effect of the number 19 is distinct and clear. The whole system is subject to one 19-Code system."

19 – God's Secret Formula and Chemistry Facts Of the 81 stable elements:

The largest Neutron number for any stable isotope is 209.

$209 = 11 \times 19$

- From unstable element 43 to unstable element 61 inclusively we have 19 elements.
- The total neutron number for all the stable isotopes is 30704

30704 = 19 x 1616.....A

The total electron number for all the stable elements

3382 = 19 x 178.....B

Therefore the total proton number for all the stable elements also

3382 = 19 x 178C

The addition of the above (A + B + C) = 37468 37468 = 19 x 1972.....D

19 and Amino Acids

- Earthly life is built on 19 left-built amino acids and an amino acid without optical center, just as the Hamlet Shakespeare is composed also from only 19 consonants.
- Amino acids are not only vital but a life requirement, since they form enzymes and proteins, that are our life-bases.
- The Duesseldorfer chemist wondered why God has decided exactly in favor of 19 + 1 amino acids? How would He be able to know also, that all great traditions have passed on the number 19 as the number of life?

 With astonishment, the chemist noticed that all pure isotopes are elements with odd atomic numbers in the periodic table. The 19 pure isotopes with odd atomic numbers in the periodic table are:

9, 11, 13, 15, 21, 25, 27, 33, 39, 41, 45, 53, 59, 65, 67, 69, 79, 83 ------ 19 isotopes

19 Ratios

There are exactly **19 ratios** between the number of stable isotopes an element has and its outer electron number.
Oxygen - 19

The half-life of oxygen-19 is only 19 seconds.

Pascal Triangle and 19

The total of the first nineteen

 (19) figures in the Pascal triangle
 is 38, which is a multiple of Number
 19.

19 x 2 = 38

 The total of the first nineteen (19) numbers in the Pascal triangle is 57, which is again a multiple of Number – 19.



19 x 3 = 57

 Blaise Pascal deduced 19 theorems related to his famous triangle. Pascal's triangle is an arithmetical one used in algebra and probability calculations.

Nineteen (19) is the 4th centered Triangular number.



Nineteen (19) is a centered hexagonal number.

• Nineteen (19) is an octahedral number.

19 – Centered Hexagonal Number



This pattern of 19 circles is easy to make with coins. It shows that 19 is a 'centered hexagonal number'.

Unstable polyhedron is stable on only 1 face – with 19 faces

An unstable polyhedron is stable on only one face.

The simplest such polyhedron known requires 19 faces and was discovered by Richard Guy.

 None with fewer faces have ever been found.

19 and Magic Hexagon

- There is only one numerically linear magic hexagon.
- It consists of the numbers 1- 19 so arranged that they add to 38 i.e. 19 x 2 = 38 in every direction

 $38 = 19 \times 2$



19 and the Magic Stars



This magic star is composed of the numbers 1 to 19. It adds to 64 along every line.

Each circle + the center also = 64

64 = 8 x 8.....Square of 8

19......8th Prime Number

64......33rd Even Number......3 + 3 = 6

64.....6 is the 4th Even Number.

Magic Hexagon of 19 Tao Imbued Permutations

The 19 Tao imbued permutations can be arranged into a magic hexagon.

Magic Hexagon of the 19 Tao Imbued Permutations (Translated from Base 3)



Adds to 39 in every direction

Statue of Liberty (USA) and 19



 The Statue of Liberty's torch shines through leaded glass, illuminated by 19 lamps

Why 19 Lamps.....

Vice President (USA) and 19 gun Salute



The Vice-President of the United States of America rates a 19-gun salute.

Why -19 Gun Salute ?

19 Bones of Human Hand

 All human hands have
 5 fingers with few exceptions and each human hand has 19
 bones

 Human hand – 19 bones = 14 bones in 5 fingers + 5 bones in palm = 19 bones in each hand



19 and the Length of Pregnancy

 'Langman's Medical Embryology' by T.W. Sadler, is used as a textbook in most of the Medical Schools in the USA. On page 88 of the Fifth edition, it is written:

"In general the length of pregnancy for a full term fetus is considered to be 280 days or 40 weeks after onset of the last menstruation, or more accurately, 266 days or 38 weeks after fertilization."

The numbers are 266 and 38 are both multiples of 19.

$266 = 19 \times 14 = 266 \text{ days}$

38 = 19 x 2 = 38 weeks

Number – 19 and the Astral Body

- **1. Intelligence**
- **2. Ego**
- 3. Feeling
- 4. Mind

Five Senses:

Sight
 Hearing
 Smell
 Taste
 Touch

Five Instruments of Action:

- 1. Mental correspondence for the executive abilities to procreate
- 2. Excrete
- 3. Talk
- 4. Walk
- 5. Exercise manual skill.

Number – 19 and the Astral Body Continued....

Five Instruments of Life Force:

- **1. Empowered to perform the crystallizing**
- 2. Assimilating
- 3. Eliminating
- 4. Metabolizing
- 5. Circulating functions of the body.

"This subtle astral encasement of 19 elements survives the death of the physical body.

Quoted from 'Autobiography of a Yogi' by Paramhansa Yogananda.

19 and the Flower of Life Symbol

The flower of life symbol consists of 19 interlocking circles



19 and Universe

The number of years of the Metonic cycle is
 19.

 Halley's Comet passes through the solar system once every 76 years, which is a multiple of 19.

l9 x 4 = 76

The Sun, Moon and Earth lineup in the same relative positions once every 19 years.

19 – 25 and Movement of Earth and Sun around their orbits

475= 19 x 25

 The days are formed as a result of the relationship between the earth and the sun. The earth revolves around its own axis 365 times while completing its cycle around the sun and during this time the sun also revolves around itself. As the earth revolves around itself 365 times, how many times the sun must have revolved itself?

25 times exactly in total

25 = 19 + 6

- The multiplier of 25 has an important role within the context of the concept of the relationship between the sun- the earth and day. Because a meton cycle that is when the sun, the earth and the moon come to a same line, occurs in every 19 years.
- Sun revolves around itself during the 19 years Meton Cycle.
- The sun turns around itself 19 x 25 = 475 times in a Meton cycle.

19 x 25= 475 times in a Meton cycle

Earth's Volume – Multiple of 19

- Earth's volume (1.083 x 10^12) is a multiple of 19. Earth's volume is in fact a multiple of 19²
- Earth's Volume –
 1.083 x 10^12 Multiple of 19²
- Earth's Volume
 = 19² × 3 × (10⁴ 9)
 - $= 1.083 \times 10^{12}$



Earth's Mass – Multiple of 19
Earth's mass (5.9736 x 10^24) is a multiple of 19

Earth's Mass – 5.9736 x 10^24 – Multiple of 19

• Earth's Mass = $19 \times 3.144 \times (10^{23})$ = 5.9736 x 10^24



"19 Trillion Miles to Explore in Space" – Quoted in National Geographic Magazine (Dec 2006)

19 – Perfect Constant Circumference of our Expanding Universe

That is why our top scientists in NASA show us recently and their explanations appear in the December issue of 2006 in National Geographic as:

"19 Trillion Miles to Explore" in Space and Universe.

The Scientists also changed the number of planets of Sun from 9 to 8 in 2006.

19 is the 8th Prime Number

Why are they picking the Number – 19? Is there any secret in this number or have they reached the conclusion that our Expanding Universe is expanding in the multiple of 19. Or whatever the size of our Expanding Universe would be it should be a multiple of 19.

Sun and 19

- Number 19 is symbolized as 'Sun' in Numerology and Sun has 8 planets.
- Sun light takes 8 minutes to reach Earth.
- Number 19 is the 8th Prime Number

s •

[°]Every thing کُلَّ شَیْءٍ returns to its origin" Prophet Muhammad(РВUН)

God and Nature's Signature on the Universe



19 is the God and Nature's Signature on the Universe

19 and Numerology

In terms of numerology, 19 is the number derived from subtracting the Ultimate Answer of Life, the Universe, and Every thing, 42, and the supposed mystical and cosmic number 23.

42 - 23 = 19

Ultimate Answer of life and Universe

Bahai's Calendar and 19

19 x 19 = 361 years Super Cycle

The Bahai's calendar is structured such that a year contains 19 months of 19 days each as well as a 19 year cycle and a 361 year.

 $19 \times 19 = 361$

Chinese Calendar and 19

- Every 19 years, the intercalary month of Chinese Calendar is inserted after the 8th month and is called "ren ba yue" (double August). It predicts tragedy and death in popular tradition.
- Every 19 years intercalary month of Chinese Calendar is inserted after the 8th month.

Number –19 is the 8th Prime Number

Bible and 19

The Number 19 is the Number of Flesh and Physical Manifestation. It is the basis of the Grace Manifest Holograph. It is the square root of the Number – 361.

$361 = 19 \times 19$

The distribution of this word is significantly maximized in Revelation 19 of the Inner Wheel of Revelation.

 The fundamental force of the Nineteenth (19) Hebrew Letter – Quph manifests in the course of World History in the Materialism of the Nineteenth -19th Century.

19th Hebrew Letter – Quph

Jews Calendar and Cycle of 19

The number of years in each cycle of inter calculated Hebrew calendar in which 7 of the 19 years are leap years.

In Hebrew or Jewish calendar, Leap years follow a 19 year schedule in which years 3, 6, 8, 11, 14, 17 and 19 are leap years. The Hebrew year 5758 (which starts in the Gregorian year 1997) is the first year of a cycle.

 19 years is the same as 235 lunations in Hebrew calendar calculations. The Hebrew calendar is computed by lunations

Idiot and 19

An *idiot* is someone with an intelligence quotient (I.Q.) less than 19.



Comparison between Tables of Number – 1 and Number – 19

 If we compare between the tables of Number- 1 and Number – 19, we can clearly see that both the tables show the same results i.e. in both the tables, the numbers increase by 1.

		Table of Number – 19:
	1 x 1 = 1 Start	$19 \times 1 = 19 = 1 + 9 = 10 = 1 + 0 = 1$
		= 1Start
	1 x 2 = 2	19 x 2 = 38 = 3 + 8 = 11 = 1 + 1 = 2
	$1 \times 3 = 3$	19 x 3 = 57 = 5 + 7 = 12 = 1 + 2 = 3
-	$1 \times 4 = 4$	19 x 4 = 76 = 7 + 6 = 13 = 1 + 3 = 4
	1 x 5 = 5	19 x 5 = 95 = 9 + 5 = 14 = 1 + 4 = 5
	$1 \times 6 = 6$	$19 \times 6 = 114 = 1 + 1 + 4 = 6$
	1 x 7 = 7	19 x 7 = 133 = 1 + 3 + 3 = 7
	$1 \times 8 = 8$	19 x 8 = 152 = 1 + 5 + 2 = 8
	1 x 9 = 9	19 x 9 = 171 = 1 + 7 + 1 = 9
	$1 \times 10 = 10 = 1 + 0 = 1$	$19 \times 10 = 190 = 1 + 9 + 0 = 10 = 1 + 0 = 1$
	End	En

 So it is quite clear from both the tables of Number – 1 and Number – 19 that they are showing the same results. Both the tables start from Number – 1 and end on Number – 1

1

Start = 1 = End

 Start is equal to end in both the tables of Number – 1 and Number – 19.

 So we can say that mathematically Number -1 and Number – 19 are showing the same results in multiplication. The results are the same.

1 = 19 As 19 = 1 + 9 = 10 = 1 + 0 = 1

19 = 1

All the Results of the Tables of 1, 10, 100, 1000, 100000 are same as the Table of Number – 19.

19 and 18

19 ----- 8th Prime Number

19 ----- **10th Odd Number**

19 ---- 8th Prime Number + 10th Odd Number

The actual position of 19 in Numbers is:

19 ----- 18 $360^{\circ} \cdot \cdot \cdot \cdot \frac{18}{8 \times (1 + 19)} = 360^{\circ}$

100% Perfection and 19

 100 is considered as "Complete" or "Perfect" as it is usually called as 100 %.
 All Perfect Numbers end either with 6 or 8.

 $100 = (6)^{2} + (8)^{2}$ $100 = (6 \times 6) + (8 \times 8)$ = (36) + (64) = (6 + 6) + (8 + 8) = 9 + 10 100 = 19

19 is the 8th Prime Number.

6 is the Perfect Constant Diameter of a Perfect Circle.

100 and Perfection

 The Number - 100 represent 'Perfection, completeness and fullness' in Mathematics.

100 – Perfection – Complete – Full

100%

"Wherever there is number, there is beauty." Proclus (410 – 485 A.D.)

19 and 360° 36 x 10° = 360°

3 – Perfect Radius of a Perfect Circle6 – Perfect Diameter of a Perfect Circle

10 = 1 + (3 + 6) = 10 = 1 + 0 = 1

19 is the Only Number in Mathematics which has the same results as of Numbers – 1, 10, 100, 1000, 10000, 100000,......

19 = 1 + (3 + 6) = 10 = 1 + 0 = 1

Definition of 19

19

The Number - 19 is the Perfect Constant Circumference of a Perfect Circle or a Perfect Sphere or a Perfect Expanding Spherical Universe.

19- GOD Signature

God's signature On the Universe


Perfect Circumference



Perfect Circumference of a Perfect Circle 19

Phase 5

Perfect Proofs of Ali Pi

Everything in our World = Pairs

Everything in our Universe is created in Pairs.

Man	Woman
Black	White
Summer	Winter
Spring	Autumn
Land	Sea
Exterior	Interior
Left	Right
Up	Down
Light	Darkness
Circle	Line

0 and 1

- 1st Even Number
 1 - 1st Odd Number

Perfection is beyond reach of any calculation. Perfection can only be achieved by Perfection.

One cannot get perfection by calculation but one can get right calculation by Perfection.

Perfect Pair of O and 1

God has created everything in this 'Perfect Expanding Spherical Universe' in Pairs. So 'O' and '1' are the pairs of a 'Circle' as the 'Circumference' and 'Diameter' of a Circle respectively.

O – Circumference J – Diameter

Perfect Pair of 19 and 6

- 19-- Circumference of a circle O
 Circumference -- Can be written as Zero O
- 6 -- Diameter of a circle 1
- Line -- Can be written as One 1
- 36 x 10 = 360 degrees of a Perfect Circle
 36 = 6 x 6 = 36
 - 3 6 are also pairs in a circle as:
- 3 Perfect Radius of a Perfect Circle or a Perfect Sphere
- 6 Perfect Diameter of a Perfect Circle or a Perfect Sphere

36 with 0 and 1



One and Only Mathematical Formula to make New Circles with 19 and 6

 $[(19 \times 19) \times (6 \times 6)] \times 10 = (1 \times 360) + (360 \times 360)$

 $[(19 \times 6) \times (19 \times 6)] \times 10 = 360 + (360 \times 360)$

 $[114 \times 114] \times 10 = 360 + (360 \times 360)$

Mathematical Formula to make new Circles and Cycles written in Number – 114 = 19 x 6



Super Cycle and Super Rotation 19 x 19 and 6 x 6

- The Number 19 and Number 6 are linked each other and it is demonstrated in the production of all new cycles and circles in our Universe, mathematics and sciences.
- Super Cycle =19° x 19° = (360° + 1°) = 361° Super Cycle
 Super Rotations = 6 x 6 x 10 = 360 Rotations
 - [Super Cycle of 19° x 19°] x = New Circle of (360°) [(6 x 6) x 10 Super rotations] (360 rotations x 360°)
- 19 and 6 are the two Fundamental Causes of a new circle of 360°
- 19 is considered as the mother and 6 is considered as the father of a new baby circle of 360 degrees.

 $[(19 \times 6) \times (19 \times 6)] \times 10 = (1 \times 360^{\circ}) \times (360 \times 360^{\circ})$

Only 6 and 19 are used to form New Circles and Cycles

Only Numbers 19 and 6 are used to create new cycles and circles:

 $[(6 \times 19) \times (6 \times 19)] \times 10 = (1 \times 360) + (360 \times 360)$

361° cycle x 360 rotations = (1 rotation x 360°) + (360 rotations x 360°)

360 x 361 = 129960 --- Another View of Amazing Numbers

- If we multiply 360 x 361, we get a **Number 129960**
- The Number 129960 has Six 6 Numbers of 1, 2, 9, 9, 6 and 0.
- The root number of **129960**

= 12 + 99 + 60 = 1+2+9+9+6+0 = 27 = 19 + 8 19 is the 8th Prime No. = 3 x 3 x 3

3 x 3 x 3 = 27 is considered as 'Perfect Cube'

3 – Perfect Radius of a Perfect Circle

Number - 360			
Cardinal	three hundred [and] sixty		
Ordinal	360th (three hundred [and] sixtieth)		
Factorization	$2^3 \cdot 3^2 \cdot 5$		
24 – Divisor (s)	1, 2, 3, 4, 5, 6, 8, 9, 10, 12, 15, 18, 20, 24, 30, 36, 40, 45, 60, 72, 90, 120, 180, 360		
Roman numeral	CCCLX		
Binary	101101000		
Duodecimal	260		
Hexadecimal	168		
Vigesimal	10		
Vigesimal	10 		

Introduction to Number 360 – 6 x 6 x 10 360 degrees = 2 x pi x radian

- The Number 360 is a natural number following 359 and preceding 361.
- 360 is the smallest number divisible by every number from 1 to 10 except 7.
- A circle is divided into 360 degrees for the purpose of angular measurement.
- 360 degrees is also called round angle. 360 is a highly composite number and no number less than twice as much has more divisors.

360 – 6 x 60

- 360 has 24 divisors (2 + 4 = 6). 360 is also a superior highly composite number and a colossally abundant number. One of 360's divisors is 72, which is the number of primes below it. In Binary numeral system, it is written as 101101000.
- 360 is also the sum of a twin prime

179 + 181 = 360

- (1 + 7 + 9) + (1 + 8 + 1) = 27 = 19 + 8

19 is the 8th Prime Number

 360 being highly composite number, allows a circle to be divided into equal segments with each segment measured in integer degrees rather than fractional degrees.

4 x 4 Magic Square of 360

85	96	97	82
91	<mark>88</mark>	87	94
86	93	92	89
98	83	84	95

All rows, columns and diagonals add to ${f 360}$

19 and 60

Round numbers are numbers that, when factored, contain a large number of primes. The greater the number of prime factors, the rounder the number.

19 - 60

 $1960 - Round Number = 2^3 \times 5 \times 7^2$

- 2 ----- 1st Prime Number
- 5 ----- 3rd Prime Number
- 7 ----- 4th Prime Number
- 1960 ---- $2^3 \times 5 \times 7^2$ --- $(1^3 \times 3 \times 4^2)$ Prime = 48

1960 ------ **48** ----- **25**th Even No - **25** = 6 + **19**

360° and Circle

The division of the circle into 360° dates back to ancient India, as found in the Rig Veda:

- Twelve spokes, one wheel, navels three.
- Who can comprehend this?
- On it placed together
- Three hundred and sixty like pegs.
- They shake not in the least.

(Dirghatama, Rg. Veda 1.164.48)

360°

 The same division is used in mathematics, but also in astronomy and geography to measure the celestial sphere and equator in terms of longitude and latitude.

360° expressed in 19

360°

36..... 19th Even Number

 $360^{\circ} = 36 \times 10^{\circ}$

10...... 6th Even Number

 $360^{\circ} = (19 - 1)^{\circ} \times (19 + 1)^{\circ} = 360^{\circ}$

360° expressed in 90

 $0^{\circ} = 90 \times 4$

 $360^\circ = 90 \times 4$

90...... 46th Even Number

4..... 3rd Even Number

 $360^{\circ} = 90^{\circ} + 90^{\circ} + 90^{\circ} + 90^{\circ} = 360^{\circ}$

3 x 3 Magic Square of 90

<mark>29</mark>	34	27
28	30	<mark>32</mark>
33	26	31

All rows, columns and diagonals add to ${f 90}$

36 and 360°



222 = 6 x 37----- 37 is the 12^{th} Prime Number (6 + 6 = 12)

Relationship between – 6 and 10			
Number	Decomposition		
1 / / /			
10	10		
3600	10 x 6 x 10 x 6		
36000	10 x 6 x 10 x 6 x 10		
216000	10 x 6 x 10 x 6 x 10 x 6		
2160000	10 x 6 x 10 x 6 x 10 x 6 x 10		
129600000	10 x 6 x 10 x 6 x 10 x6x10x6		

360 Degrees

I define 360 degrees as:

360 are the Only Perfect Constant Highest Total Degrees of a Perfect Circle, Perfect Sphere and a Perfect Sphere of Expanding Universe.

360°

 $360^2 = (2^3 \times 3^2 \times 5) \times (2^3 \times 3^2 \times 5)$

 $360^2 = (2^6) \times (3^4) \times (5^2)$

Introduction to 361

- 361 is a Square number 19 x 19.
- 361 is a Centered Octagonal number.
- 361 is a Centered Decagonal number.
- 361 is a Centered triangular number.
- 361^361 + 361! 361 x 361 + 361/361 is a 924digit prime.
- 361 is a Centered 36-gonal number.
- One of Ramanujan's approximations of pi was (9² + 19²/22)¹/₄. Note that 361 is a prime square (19²).
- 19² = 361 and (3 x 6) +1 = 19

Relationship between 361 and 360 in Division

If we divide the Number – 361 with Number – 360, we would get:

$361/360 = 1 + 1^{\circ}$ degree

361/360 = 1 + 0.002777...

Relationship between 360 and 361

Both 360 and 361 are at the same position of 181



Ali Pi and 181

181 ------ 42nd Prime Number

42.... 4 + 2 = 6.....Perfect Diameter

The reversal of 42 is 24

- 42 + 24 = 66
- **48** **4** + **8** = **12**

12...... 1 + 2 = 3......Perfect Radius

Ali Pi and 181 181 ----- 42nd Prime Number 541 ----- 100th Prime Number 541 - 181 ---- 100th Prime – 42nd Prime --- 360 100 - 42 ---- 58 ----- 360 114------ 58th Even Number ------ 360 **114** ----- Perfect Area and Volume of Perfect Sphere **360** ----- Perfect Degrees of a Perfect Sphere 58 ------ 30th Even Number **30** ------ **19**th Composite Number ----- Perfect Circumference of Perfect Sphere

4 x 4 Magic Square using 1 and 8

The following 4 x 4 magic square totals 19998 in all directions in the square as is upside down, or as reflected in a mirror.

.9998

8811	8188	1111	1888
1118	1881	8818	8181
8888	8111	1188	1811
1181	1818	8881	8118



What is the secret in 360° 360° 3 – Perfect Radius of a Perfect Circle **O** – Perfect Circumference - ?

What is the secret of 10 in 36 x 10 360° = 36 x 10

What is the secret of 10 in 360° with 3 and 6?

10 = 1 + (3 + 6) = 1 + 9 = 10 = 1 + 0 = 1

19 = 1 + (3 + 6) = 1 + 9 = 10 = 1 + 0 = 1.....Root number of 19 is also 1.

The root numbers of 10 and 19 are the same i.e. Number – 1

Number – 19 is the only Number in mathematics which can replace the tables of 1, 10, 100, 1000, 10000,.....

O = 19 --- Perfect Circumference of a Perfect Circle

Perfect Circumference of 360° 360° What is the Perfect Circumference? $360^\circ = (19 - 1)^\circ \times (19 + 1)^\circ = 360^\circ$ Perfect Circumference = 19

361 - 360

361 – 360 or if we write in a Single Number – **361360**

19 = 361360= 3 + 6 + 1 + 3 + 6 + 0 = 19

6......4th Even Number 19......8th Prime Number 19.....10th Odd Number

Perfect Circle

• 360 degrees = 36×10 = (3 + 6) + (1 + 0)= (9) + (1)

Where

- 3 -- represent the 'Perfect Constant Radius of a Perfect Sphere or a Perfect Circle.'
- 6 -- represent the 'Perfect Constant Diameter of a Perfect Sphere or a Perfect Circle.'
- 1 -- is the one of the root number of 10 (10 = 1 + 0 = 1) and 19 (19 = 1 + 9 = 10 = 1 + 0 = 1) which represents the 'Perfect Constant Circumference of a Perfect Sphere or a Perfect Circle.'

"Knowledge has ten parts and out of it, nine parts are the knowledge of mathematics and one part is the other knowledge."

Muhammad (SAW) - Last Prophet of Islam
Perfect Ali Pi

Perfect Ali T = Perfect Circumference/Perfect Diameter of a Perfect Circle

Perfect Ali $\pi = 19/6$

Perfect Ali π



Perfect Ali π = 3.16666666.....

A Great Moment in the History of Man Kind

Most Remarkable Discovery in the History of Mankind

Real and Rational Value of Ali T

19 - Proofs of Ali π

Ali $\pi = 3.1666666....$

Beauty is the first test of Mathematics

"The mathematician's patterns, like the painter's or the poet's, must be beautiful; the ideas, like the colours or the words, must fit together in a harmonious way. Beauty is the first test: there is no permanent place in the world for ugly mathematics."

G.H.Hardy, A Mathematician's Apology

Perfect Diameter – 6 and Perfect Circumference – 19

19 - Perfect Proofs of Perfection of a Perfect Sphere

1. Perfect Surface Area ------ 114

2. Perfect Volume ------ 114

3. Perfect Diameter(6) x Circumference(19)-- 114

4. Perfect Prime 619 ------ 114th Prime No.

5. Perfect Hemisphere(57) + Hemisphere(57)--114



Perfect Model of a Perfect Sphere 114	
Perfect Diameter – 6 and Perfect Circumference – 19	
8. Perfect Ali Pi Numbers – 6 and 19, Powerful Numbers and 360	
25 6th Powerful Number	
144 19th Powerful Number	
 (6 x 19) - Powerful Numbers 25 x 144 = 3600 = 360 x 10 (6 x 19) - Powerful Numbers 360 x 10 	
360 x 10 114	
9. Perfect Ali Pi Numbers and Perfect Number - 6 6 x 19 114 114 114 1 + 1 + 4 114 6 114	



Perfect Diameter – 6 and Perfect Circumference – 19

11. There are 57 Even Numbers below --- 114 There are 57 Odd Numbers below ---- 114

57 Even Numbers + 57 Odd Numbers -- 114

57 -- Perfect Hemisphere

(19 x 3) Even Numbers + (19 x 3) Odd Numbers --- 114

57 (Even Hemisphere) + 57 (Odd Hemisphere) ----- 114

12. There are 30 Prime Numbers below --- 114

Number 30 19th Composite Number



Perfect Model of a Perfect Sphere -- 114 **Perfect Diameter – 6 and Perfect Circumference – 19** 14. Perfect Numbers and 6, 19 and 114: First 4 Perfect Numbers in mathematics are: 6,28,496,8128..... 6...1st and smallest Perfect Number • Perfect Diameter of a Perfect Sphere

114..... 1 + 1 + 4 = 6.....Perfect Number

Perfect Diameter – 6 and Perfect Circumference – 19

The root number of 3rd and 4th Perfect Numbers 496 and 8128 is Number – 19.

496.....3rd Perfect Number 496......4 + 9 + 6 = 19

496.....**19**...Perfect Circumference of a Perfect Sphere

8128..... 4th Perfect Number 8128.....8 + 1 + 2 + 8 = 19

8128...19...Perfect Circumference of a Perfect Sphere

6 is the 1st and the smallest Perfect Number and 19 is the root number of 3rd and 4th Perfect Numbers.

Both 6 and 19 are the representation of Perfect Numbers in mathematics.

Perfect Diameter – 6 and Perfect Circumference – 19

15. Perfection – 100% and Perfect Ali Numbers – 6 and 19

All Perfect Numbers in Mathematics end either with Number – 6 or Number – 8.

 $100 = (6 \times 6) + (8 \times 8)$

6 -- 1st Perfect Number 6 = Perfect Diameter of a Perfect Sphere

8 --- 19 is the 8th Prime Number 19 = Perfect Circumference of a Perfect Sphere

100 = (36) + (64) = (3 + 6) + (6 + 4) = (9) + (10)

100 ----- 19 ---- Perfection



Perfect Model of a Perfect Sphere -- 114 **Perfect Diameter – 6 and Perfect Circumference – 19** $14 \times 14 = 196$ 196.....99th Even Number 99.... 81 + 18 81 and 18 are the reversal numbers of each other. 99....9 + 9 = 18...1 + 8 = 9If we write 99 upside down, it will become 66 The Perfect Ali Pi = 3.166.... The Number – 66 appears after 3.1 in Ali Pi

99...... 100th Odd Number 100....represents 'Perfection', 'Completion' and 'Flawlessness'

Perfect Diameter – 6 and Perfect Circumference – 19

17. Perfection of 619 and 196 with other Numbers: 619 and 196 contain – 3 numbers: 1, 6 and 9

Now we see other numbers which contain the same numbers.

14	X	14			196
13	Х	13			169
31	X	31			961

13 is the reversal of Number – 31 13.....6th Prime Number 31.....11th Prime Number 13 x 316th Prime Number x 11th Prime Number 13 x 3166 6666 6666 66 appears in Perfect Ali Pi after 3.1.....

Perfect Ali Pi = 3.166.....

Perfect Model of a Perfect Sphere -- 114 Perfect Diameter – 6 and Perfect Circumference – 19 18. Perfect Ali Pi Numbers – 6 and 19 and Prime and Even Numbers 58th Even Number ----- 114 5 + 8 --- 13 --- 6th Prime Number 13 + 6th Prime Number = 19 19 - 6 = 1313 - - 1 + 3 = 46 ---- 4th Even Number 6 + 4th Even Number = 10 10 ---- 6th Even Number **B**: 58 ----- 30th Even Number 30 ----- 19th Composite Number 19 ----- 8th Prime Number 19 + 8th Prime Number ----- $27 = 3 \times 3 \times 3$ **3** ---- Perfect Radius of a Perfect Sphere

Perfect Diameter – 6 and Perfect Circumference – 19

C. Perfect Ali Pi Numbers – 6 and 19 and Prime Numbers

13......6thPrime Number67......19thPrime Number

67 6 + 7 = 13....6th Prime Number

13 + 6 = 19

Perfect Diameter – 6 and Perfect Circumference – 19

19. A) Perfect Hemisphere – 57, Perfect Number – 6 and 114

 6×19 ------ 114 (3 × 19) + (3 × 19) ----- 114

57 (Perfect Hemisphere)+ 57 (Perfect Hemisphere)-- 114 (Perfect Sphere)

(5+7) + (5+7) - --- 1 + 1 + 4



6 --- 1st and Smallest Perfect Number

Perfect Diameter – 6 and Perfect Circumference – 19

B) Perfection of Number – 57:

The reversal of Number – 57 is Number – 75

We can write the Number – 75 in term of Perfect Radius, Diameter and Circumference of a Perfect Sphere.

75 25 x 3

75.....Perfect Equation

6		· · · · · · · · · · · · · · · · · · ·
	 ••••••	•
\3		<u>\</u>

Perfect Diameter of a Perfect Sphere .. Perfect Circumference of a Perfect Sphere . Perfect Radius of a Perfect Sphere.



Perfect Model of a Perfect Sphere -- 114 **Perfect Diameter – 6 and Perfect Circumference – 19** $114 = 19 \times 6$ D) 114 x Ali Pi $= 114 \times 3.166666... = 361$ $361 = 19 \times 19$ **361** --- Perfect Super Cycle

Perfect Diameter – 6 and Perfect Circumference – 19



Perfect Model of a Perfect Sphere ---_114 **Perfect Diameter – 6 and Perfect Circumference – 19** 1. Perfect Ali Pi = 19/6 = 3.16666..... 2. Perfect Ali Pi = $\sqrt{10 + 10^{\circ}} = \sqrt{10.0277777}$ = 3.16666..... **3. Perfect Ali Pi = 114/36 = 3.16666....** 4. Perfect Ali Pi = 361/114 = 3.1666666...5. Perfect Ali Pi = 3 + 1/6 = 3.16666666..... 6. Perfect Ali Pi = 3 + 60/360 = 3.166666666.....

Perfect Ali Pi – 3.16....and Famous Mathematicians value of *T*First Ever Value of Pi in history of mathematics:
Rhind Papyrus Ahmes – Egypt – 2000 BCE----- 256/81 = 3.160

Hon Han Shu--China ----130 BCE.... $\sqrt{10} = 3.16...$

Known as Root of Perfection for more than 1000 years

• Brahmagupta -- India -- 640 CE... $\sqrt{10} = 3.16...$

Leonhard Euler (1773 CE), famous Swiss mathematician developed a famous equation for Pi as:

 $\mathcal{T} = \lim(n \to \infty) [(1/n) + (1/6n^2) + 4n\{(1/n^2+1) + (1/n^2+2^2) + ... + (1/n^2+n^2)\}]$

Perfect Ali Pi – 3.16....and Famous Mathematicians value of \mathcal{T} In Euler's Equation if n = 1, the value of pi is: $\mathcal{T} = 3.16666666$... Perfect Pi

Perfect Ali Pi ----2007 AD-----3.166666....

- Perfect Ali Pi= 19/6 = Perfect Circumference/Perfect Diameter
- Perfect Root of Perfection = π = √10 + 10° = 3.16666......

• Perfect $\pi = 361/114 = 114/36 = 3 + 1/6$ = 3 + 6/60 = 3.166666.....

Perfect Ali $\pi = 3.16666....$

Irrational VS Rational Irrational Greek 3.1415926535897932384626 4338.....Infinite Imperfection

Irrational Greek Pi to Rational Ali Pi

- Naming the Irrational Greek Pi to Rational "Ali Pi"
- Naming the "Pi" new rational constant number
 - I would name this mysterious and historical Pi as

"Ali Pi"

 Ali Pi – Most Important Discovery in the History of Mathematics and Sciences

Universal Ali π

ALI T = God's Signature on Universe / God's Perfection in Universe

= 19/6

Definition of Ali Pi

Ali pi is a universe where every thing exists.

I define Ali Pi Mathematically as:

Ali pi is a constant, rational real number and ratio obtained by dividing the real and constant number of circumference of a perfect sphere or a perfect circle by the real and constant number of diameter of a perfect sphere or perfect circle and is equal to (19) divided by (6) = 19/6 or

Mysterious Hidden TT For Centuries

"This measure will and must prove a great benefit to mankind, when understood, as it is the basis and foundation of mathematical operations, for, without a perfect quadrature of the circle, measures, weighs, etc, must still remain hidden and unrevealed facts, which are and will be of great importance to rising generations. The improvements that will arise from this measure fifty years hence I cannot paint in imagination"

John Davis, The Measure of the Circle, 1854

with Perfect Diameter – 6 and Perfect Circumference – 19

Surface Area = π x d² of a sphere = 19/6 x 6 x 6 = 114

Perfect Area = 114

with Perfect Diameter – 6 and Perfect Circumference – 19

Volume of = $1/6 \times \pi x d^3$ sphere = $1/6 \times 19/6 \times 6 \times 6 \times 6$ = 114

Perfect Volume ---- 114

with Perfect Diameter – 6 and Perfect Circumference – 19

Perfect Diameter x Circumference = 6 x 19

Perfect 6 x 19 ----- 114

Most Perfect Formula of a Sphere

 Perfect Surface Area of a = 114 (Unit square) Perfect Sphere

Perfect Volume of a = 114 (Unit cube) Perfect Sphere

Circumference x Diameter = 114 (Unit square) of a Perfect Sphere

Perfection = Perfection = Perfection
with Perfect Diameter – 6 and Perfect Circumference – 19

Perfect Prime ----- 619

Perfect Prime 619 --- 114th Prime Number

Perfect Model of a Perfect Sphere 114 Perfect Diameter – 6 and Perfect Circumference – 19

Perfect Hemisphere of a Perfect Sphere = 114/2 = 57

Perfect Hemisphere + Perfect Hemisphere = Perfect Sphere



Perfect Diameter – 6 and Perfect Circumference – 19

∏ = Circumference / Diameter
 ∏ can be written as:
 Perfect ∏ = 19/6 ---- 114/36

■ Perfect ∏ = 3.166666666666.....

Π can also be written as:
 Perfect Π = 19/6 --- 361/114

Perfect ∏ = 3.16666666666666



Perfect Model of a Perfect Sphere 114
Perfect Diameter – 6 and Perfect Circumference – 19
10 6th Even Number
 10 is the sum of first 4 numbers and Number 6 is the 4th Even Number.
- 10 = 1 + 2 + 3 + 4
6 4th Even Number
■ 36 x 10 = 360°
36 x 10 = 19th Even Number x 6th Even Number
360°114

Perfect Diameter – 6 and Perfect Circumference – 19

Formula to make new circle of 360°

 $(6 \times 19) \times (6 \times 19) \times 10 = (1 \times 360) + (360 \times 360)$

 $- (114 \times 114) \times 10 = (1 \times 360) + (360 \times 360)$

 $(360) + (360 \times 360) = (114 \times 114) \times 10$

with Perfect Diameter – 6 and Perfect Circumference – 19

6 x 19 ---- 114

114 = 1 + 1 + 4 - - - - 6

6 -- 1st and Smallest Perfect Number



6 ----- 1st and Smallest Perfect Number

Perfect Sphere --114Perfect Cube --216

Side of a cube = a = 6

Area of the Cube ----- 216

Volume of the Cube ----- 216

Perfect Cube ----- 216

Only with side = 6, a Perfect Cube can be made

Perfect Sphere -- 114 Perfect Cube -- 216 Perfect Cube - 216 ----- Perfect Sphere - 114 2 ----- 1st Prime Number ----- 1 ----- 1st Odd Number ------ 1 ----- 4th Even Number ----- 4 6 --216 _____ 1 1 4 Perfect Cube of 216 with perfect sides of 6

Perfect Sphere of 114 with perfect diameter of 6

Perfect Diameter – 6 and Perfect Circumference – 19

6 and 19 with 360°

- $360^\circ = 36 \times 10$
- 36 and 10 are two secret numbers of a Perfect and complete Circle.
- The 4 numbers in 360 = 36 x 10 are:

3, 6, 1 and 0

Now we see the Numbers 36 and 10 with Ali Pi numbers:
 6 ----- Perfect Diameter of a Perfect circle
 6 x 6 ------ 036

036 ----- 361



Perfect Model of a Perfect Sphere 114				
Perfect Diameter – 6 and Perfect Circumference – 19				
Perfect Ali Pi = 3.16				
If we add the first 3 numbers of Ali Pi, we see:				
3 + 16 = 19 B:				
Ali Pi = 3.16contain 3 numbers as: 3, 1 and 6				
which are same in:				
361 which is square of 19 361 = 19 x 19				

Perfect Diameter – 6 and Perfect Circumference – 19



Perfect Diameter – 6 and Perfect Circumference – 19



Perfect Diameter – 6 and Perfect Circumference – 19

4 + 8 = 12

G:

We can make a perfect circle by dividing it into 12 equal parts of 30° degrees each.

$12 \times 30^{\circ} = 360^{\circ}$ (6 × 30°) + (6 × 30°) = 360°

Number – 30 -- 19th Composite number

Perfect Diameter – 6 and Perfect Circumference – 19

Ali Pi = 3.166.....

First two numbers in Ali Pi --- 31

31 ----- 11th Prime number

The reversal of 31 is 13, which is also a prime number

13..... 6th Prime Number

6 is the only perfect number repeating infinitely after 3.1....in Ali Pi.

31 x 13 ----- 11th Prime Number x 6th Prime Number

31 x 13 ----- 66

Perfect Diameter – 6 and Perfect Circumference – 19

Ali Pi can be written showing 66 as: Ali Pi = 3.1 66 66 66 66 66

> $13^2 = 169$ $31^2 = 961$

961 is the reversal of 169 as 31 is the reversal of 13

The numbers 169 and 961 both contain the Ali Pi numbers as

Ali Pi contain 19 and 6

1 - 9 - 6

Perfect Diameter = 6 Perfect Circumference = 19 Perfect Radius = 3

6 – 19 – 3 And Human Bones

619/3 = 206. 33....

206 - Total Bones in a Human Body 33 - Total Bones in Human Vertebrae

4 x 4 Magic Square of 206

47	57	<mark>58</mark>	44
<mark>52</mark>	50	49	55
48	54	53	51
59	45	46	56

All rows, columns and diagonals add to $\mathbf{206}$

Perfect Diameter – 6 and Perfect Circumference – 19

Ali Pi = Super Cycle / 114 Super Cycle = 19 x 19 = 361 Ali Pi = 361 / 114 = 3.16666666......

Perfect Ali Pi and Famous Equation of Leonhard Euler of π

- Leonhard Paul Euler (1707AD 1783AD) was a pioneering Swiss mathematician and physicist. He published more papers than any other mathematician.
- He made important discoveries in fields as diverse as calculus and graph theory. He also introduced much of the modern mathematical terminology and notation.
 Euler is considered to be the preeminent mathematician of the 18th Century and one of the greatest of all time.

A statement attributed to Pierre-Simon Laplace expresses Euler's influence on mathematics:

"Read Euler, read Euler, he is a master for us all."

Perfect Ali Pi and Famous Equation of Leonhard Euler of π (Cont..)

Leonhard Euler developed a famous equation for π as: $\pi = \lim(n \rightarrow \infty)[(1/n) + (1/6n^2) + 4n\{(1/n^2+1) + (1/n^2+2^2) + ... + (1/n^2+n^2)\}]$

Reference: This famous equation is discovered in a correspondence to Christian Goldbach, Castellanos, 'The Ubiquitous T ," – Page – 73

Ali Pi – 3.16....and 496 496-----3rd Perfect Number Pi ----starts with 3 3-----Perfect Radius

496 - - - - 4 + 9 + 6 = 19

19 ----- Perfect Circumference

496----- **31 x 16**

Ali Pi----- 3,16.....

Ali Pi is showing us 2 Numbers - 31 and 16 as:

Ali Pi ----- 3.1 and .16

Area



- Area is a physical quantity expressing the size of a part of a surface. The term can also be used in a nonmathematical context to be mean "vicinity".
- Surface area is the summation of the areas of the exposed sides of an object



Volume of Sphere and Cube

- The volume of a solid object is the three-dimensional concept of how much space it occupies, often quantified numerically. One-dimensional objects such as lines and two-dimensional objects such as squares are assigned zero volume in the three-dimensional space.
- Volumes of straight-edged and circular shapes are calculated using arithmetic formulas.



Perfect Area of a Perfect Circle - 28.5

28.5

 The 'Perfect Area' of a 'Perfect Circle' is calculated by using 'Perfect Ali Pi' as:

Area of the circle = \$\mathbb{T}\$ × area of the shaded square
 Area of the circle = 19/6 x (3 x 3)

 If *∏* = 19/6 and r = 3
 Perfect Area of a Perfect Circle would be: 19/6 x (3 x 3) = 28.5

Perfect Area of a Perfect Circle - 28.5 (Cont..)

- 28 ---- 2nd Perfect Number and only Perfect Number in two digits in Mathematics
- All Perfect Numbers end either with only two Numbers- 6 or 8
- 6 + 8 = 14 = 1 + 4 = 5....root number of all ending numbers of Perfect Numbers.
- The root number of 28.5 is:
 28 + 5 = 33 = 3 + 3 = 6..... Perfect Number

Perfect Area – 28.5 expressed in other Important Numbers

Number 28.5 can be written as:

28.5 = 2 + 8 + 5 = 15 = 1 + 5 = 6 28.5 = 28 + 5 = 33 = 3 + 3 = 6 28.5 = (14 + 14) + (5) = [(1 + 4) + (1 + 4)] + (5) = [5 + 5] + 5 = 15 = 1 + 5= 5

28.5 = 57/2.....where the Number 57 represents the 'Perfect Hemisphere' and half of the 'Perfect Area and Perfect Volume' of a 'Perfect Sphere'

 28.5 = 114/4where the Number – 114 (19 x 6) represents the full 'Perfect Sphere' and the 'Perfect Surface Area and the Perfect Volume' of a 'Perfect Sphere'.



28.5

Perfect and Exact Area of a Perfect Circle 28.5 No Approximation – No Estimation

Perfect Sphere – 28.5 3 x 3 Magic Square – 28.5 x 28.5



 Remarkably, each row and column of this magic square sums to a number – 812.25

$28.5 \times 28.5 = 28.5^2 \dots 812.25$

 This 3 x 3 magic square of numbers satisfy the 6 – orthogonal sums so that each row and column sums are equal to 812.25-- 28.5 x 28.5

28.5.....Perfect Area of a Perfect Circle

Perfect Circle

- A Perfect Circle is a highly symmetrical 2-Dimensional shape of 360 degrees with a Perfect Circumference of 19 and Perfect Diameter of 6 with a Perfect Surface Area of 28.5 having both rotational and reflection symmetries and with a Perfect Constant Ratio - Pi of 3.1666.....
- Perfect Circle does exist in Universe and Mathematics. In circle every line through the center forms a line of reflection symmetry and it has rotational symmetry around the centre for every angle. Its symmetry group is the orthogonal group O (2, R). The group of rotation alone is the circle group T. The circle is the only 2-dimensional shape with the highest area for a given length of perimeter or circumference.

Perfection is the rule of God and Universe.

Six - 6 Perfect Constant Dimensions and Attributes of a Perfect Constant Circle to be a Perfect Constant Model

= 19
= 6
= 3
= 28.5
= 360°
= 19/6

 The constant, rational and real value of Pi from the constant, rational and real values of Perfect Sphere would be:

Pi = circumference / Diameter of a Perfect Circle

Pi = 19 / 6



Value of Surface Area > Volume of a Sphere (Cont..)

 Volume of a sphere = 4/3 x pi x (radius)³ = 33.77777777.....

Surface area of a sphere = 50.666.....

Volume of a sphere = 33.777.....

Resulting value of

Surface area > Volume of a sphere

The numbers and value of Surface area is Not Equal to the Volume of a Sphere.

Value of Surface Area < Volume of a Sphere

Area and Volume of a Sphere

Let radius of a sphere = 5 Diameter of a sphere = 10 Pi = 19/6

Circumference of a sphere = 31.66666....

Area of a sphere = 4 x pi x (radius)² = 316.666666.....
Value of Surface Area < Volume of a Sphere (Cont..)

- Volume of a sphere = 4/3 x pi x (radius)³
 = 527.7777777777.....
- Surface area of a sphere = 316.666.....
- Volume of a sphere = 527.777.....
- Resulting Value of

Surface area < Volume of a sphere

The numbers and value of Surface area is Not Equal to the Volume of a Sphere

Perfect Surface Area of a Perfect Sphere

Perfect Circumference of a Perfect Sphere = 19

Perfect Diameter of a Perfect Sphere = 6

Perfect Ali Pi = 19/6

Perfect Surface Area = $4 \times \pi \times ($ Square of of a Perfect Sphere radius)

Perfect Surface Area = 114

Perfect Area of a Perfect Sphere



Perfect Volume of a Perfect Sphere

Perfect Circumference of a Perfect Sphere = 19

Perfect Diameter of a Perfect Sphere = 6

Perfect Ali Pi = 19/6

Perfect Volume of a = 4/3 x Pi x (radius³) Perfect Sphere

= 1/6 x Pi x (diameter³)

Perfect Volume = 114

Perfect Volume of a Perfect Sphere

 Volume is defined as the amount of space a matter or object takes up.

Volume = $1/6 \times \pi (d \times d)$ Volume = $1/6 \times 19/6 \times (6 \times 6)$

Perfect Volume and Surface Area of a Perfect Sphere



Area and Volume of a Perfect Sphere

Area:

The place covered by an object or matter is called an area of a matter. It is expressed in Units square, meter square, centimeters square, etc.

Volume:

The amount of space a matter or an object takes is called volume. Units – Cube of a unit like meter cube, centimeter cube, etc

- Only in special and Perfect case, the Value of Area of a sphere becomes equal to the value of the Volume of a sphere.
- So in a case of Perfect Sphere:

Area of a Perfect Sphere = 114 Volume of a Perfect Sphere = 114

Now is there any doubt about the 'Perfection' of the numbers taken as Diameter and Circumference of a Perfect Sphere.

Surface Area = 114 Volume = 114of a Perfect Sphere Radius of a sphere = 3Diameter of a sphere = 6**Circumference of a sphere = 19** Area of a sphere = 4 x Pi x radius² $= 4 \times 19/6 \times 3 \times 3$ = 114 • Volume of a sphere = $4/3 \times pi \times radius^3$ $= 4/3 \times 19/6 \times 3 \times 3 \times 3$

Surface Area = 114 Volume = 114 of a Perfect Sphere (Cont..)

Surface Area of a Perfect Sphere = 114

Volume of a Perfect Sphere = 114

Circumference x Diameter = 19 x 6 = 114

114 = 114 = 114

Ali Pi = 19/6Proved

Perfection = Perfection = Perfection • Area of a Perfect Sphere = 19x6 = 114Circumference x Diameter = C x D of a Perfect Sphere $= 19 \times 6 = 114$ Volume of a Perfect Sphere=19 x 6 = 114 $(19 \times 6) = (19 \times 6) = (19 \times 6)$ 114 = 114 = 114**Perfection = Perfection = Perfection Perfect Amazing Results with Perfect Numbers**

619 - 114th Prime Number

$6 \times 19 = 114$

619 ... is the 114th Prime Number

114 is the Prime Index of Number – 619

Another Amazing Perfection in Mathematics

619 and 114

619 ----- 114th Prime Number 733 ----- 130th Prime Number

 130^{th} Prime – 114^{th} Prime = 733 - 619 = 114

130 - 114 = 16.....114

16 ---- **19** when written upside down

16 x 16----- 256

256th Prime Number ---- 1619

619 and 180 – Half Circle 619..... 114th Prime Number

439...... 85th Prime Number

 114^{th} Prime – 85^{th} Prime = 619 - 85 = 180

114 - 85 = 29.....180

180.....represents Half Circle**180°**

29..... **10**th Prime Number

619 and Number Systems

- In base 2(binary), 619 is written as 1001101011.
- In base 8(octal), it is written as 1153.
- In base 16(hexadecimal), 619 is written as 26B.
- In Roman numeral, it is written as: DCXIX.
- 619 is also an odd number.
- 6! 5! + 4! 3! + 2! 1!
- 619 is the only 3-digit prime such that if
 F(p)= 2*p⁵-1, then F(619), F(F(619)), and
 F(F(F(619))) are all primes.
- 619 is the smallest non-palindromic strobogrammatic prime.

619 and Golden Ratio – Phi Φ

Golden Ratio, also known as Divine Proportion represented by Greek letter Phi – Φ is one the most Famous mathematical constant and its value is:

Φ = 1.618.....

If we add Number – 1 from the left side of the decimal and Number – 618 from the right side of the decimal we would get another amazing number as:

1 + 618 = 619

619114th Prime Number

π and Φ – Common Numbers – 6, 1 and 9

Pi and Phi – Two most famous mathematical constants:

Pi --- Number of the Universe and Nature Phi --- Divine Proportion and Golden Ratio

Pi = 3.166..... and Phi = 1.618.....

If we add the left side numbers and the right side numbers to the decimal of both Pi and Phi, we see amazing numbers as:

Pi --- 3 + 166 = 169 and Phi --- 1 + 618 = 619



 π and Φ – Common Numbers – 6, 1 and 9 (Cont..)

Pi ----- 169 and Phi ----- 619

169 = 13 x 13 and 619 114th Prime

Amazing Relationship between numbers of Pi and Phi.

Pi = 3.166..... and Phi = 1.618.....

Both mathematical numbers are divine, natural and universal mathematical constants and their numbers even show common numbers.

π and Φ – Common Numbers – 6, 1 and 9 (Cont..)

If we upside down the numbers 169, we see:

 $169.....196.....14 \times 14 = 196$

169 13 x 13 196 14 x 14

The reverse of Number – 13 is 31

13 x 13 169 31 x 31 961

The reverse of Number – 169 is 961

6.19 – Length of Steiner tree

6.19.....

6.19....is the approximate length of the shortest Steiner tree connecting the vertices of a Unit Cube.

[MG v78 161]

Perfect Diameter 6 Perfect Circumference 19 619

310..... 31 x 10

 31......11th Prime Number

 10.......6th Even Number

 31 x 10......11th Prime No. x 6th Even No

 619......310.....31 x 10.....11 x 6

619......66

619 and 3 x 3 Magic Square

This square has the smallest possible magic constant – **3117** for an order – 3 square filled with primes in an arithmetic sequence. In an arithmetic sequence, each term is equal to the sum of the preceding term and a constant.

2447 244 7			
311/311 - /	1669	199	1249
311 64 th Prime			
7 4 th Prime	619	1039	1459
$311 - 7 04 \times 4 = 250 = 10 \times 10$	829	1879	409
3117 31 - 17	O Z J		
31 11 th Prime			
17 7 th Prime			
3117 11 x 7 = 77 7 + 7	' = 14 =	7 x 7 =	49

Perfect Area – Perfect Volume – Perfect (Circumference x Diameter)

114 = 114 = 114

1 + 1 + 4 = 6

6 - Perfect Number in Mathematics

30 Prime Numbers Below 114

There are 30 Prime Numbers below 114

30 is the 19th Composite Number

Another Amazing Perfection in Mathematics

30 ----- 19th Composite Number

$30 \times 19 = 570 = 57 \times 10$

57 ------ Perfect Hemisphere

 10 ------ 6th Even Number
 + 6 = 16....when written upside down - 19

2). 30 + 19 = 49 ----- 4 + 9 = 13 13 ----- 6th Prime Number 13 + 6 = 19 ----- Perfect Circumference

3). 30 = 11 + 19 11 ----- 5th Prime Number 19 ----- 8th Prime Number 30 ----- 11 + 19 ----- (5th + 8th)Prime Numbers 30 ----- 13 13 ----- 6th Prime Number 13 + 6 = 19 ----- Perfect Circumference

30 ----- 19th Composite Number

4). 30 + 19 = 49 ----- 7 x 7 = 49 7 ----- 4th Prime Number 49 ----- 7 x 7 ----- (4th x 4th) Prime Numbers 49 ----- 16 16..... When written upside down - 19

16 ----- 19

16 ------ also appears in Ali Pi as 3.16

36 ----- 19th Even Number

36 + 19 = 55

55 ----- 28th Odd Number

Famous equation of 6 as root of 30

$6 = \sqrt{30} + \sqrt{30} + \sqrt{30} + \dots$

- 30 ----- 19th Composite number
- 6 + 30 = 36 ----- 19th Even number
- 30 6 = 24 ---- 13th Even number
 - 13 ----- 6th Prime number
 - 13 + 6 = 19
- 30/6 = 5 ----- 3rd Prime number
 - **3** ----- Perfect Radius of a Perfect Sphere
- 30 x 6 = 180 ----- Half of a Perfect Sphere
 - 180 ----- 91st Even number
 - 91 ----- is the reversal of 19

Seven – 7 - Perfect Constant Dimensions and Attributes of a Perfect Constant Sphere to be a Perfect Constant Model

1. Circumference	= 19
2. Diameter	= 6
3. Radius	= 3
4. Surface Area	= 19 x 6 = 114
5. Volume	$= 19 \times 6 = 114$
6. Degrees	= 360
7. Pi	= 19/6

The constant, rational and real value of Pi from the constant, rational and real values of Perfect Sphere would be:

Pi = circumference / Diameter of a Perfect sphere

Pi = 19 / 6

Six – 6 Perfect Results using Perfect Values of 6 and 19

Perfect Formula to make new Circles and cycles is:

 $[(6 \times 19) \times (6 \times 19)] \times 10 = (1 \times 360^{\circ}) + (360^{\circ} \times 360^{\circ})$

 $[114 \times 114] \times 10 = (360^{\circ}) + (360^{\circ} \times 360^{\circ})$A

Perfect Area of a Perfect Sphere = 6 x 19 = 114.....B

Perfect Volume of a Perfect Sphere = 6 x 19 = 114.....C

Perfect Circumference x Perfect Diameter = 6 x 19 = 114.....D

Perfect Prime 619......F

Perfect 114 = 1 + 1 + 4 = 6First Perfect
 Number in Mathematics

Perfect Mathematical Formula of a Perfect Sphere

 114 – Perfect Surface Area and Volume of a Perfect Sphere.

6 x 19 = 114 Most Mysterious Mathematical Formula

114 = 7 + 100 + 7 = 114

114 = 57 + 57 = 114

114 = 1 + 1 + 4 = 6

Perfect Mathematical Pairs in Science and Mathematics

- 6 and 19 are the Perfect Mathematical Pair in Mathematics and Universe
- 19 and 6 are the "Perfect Pairs' of a 'Perfect Sphere or Perfect Circle' representing the 'Perfect Circumference' and 'Perfect Diameter' respectively.
- Ali Pi can also be expressed mathematically with Number – 19 and Number – 6 as:

Ali Pi = $\sqrt{(19 \times 19)}$ (6 × 6)]

Ali Pi = $\sqrt{(10 + 10 \text{ degrees})}$

Ali Pi = 3.1666666666...

Most Mysterious Formula of a Perfect Sphere

Circumference x Diameter= 114 19 x 6 = 114

19x6=114

4 x 4 Magic Square of 114

24	34	35	21
29	27	26	32
25	31	30	28
36	22	23	33

All rows, columns and diagonals add to 114 $19 \times 6 = 114$

Perfect Sphere – 114 **3 x 3 Magic Square – 114 x 114**



Remarkably, each row and column of this magic square sums to a square number – 12996 This 3 x 3 magic square of square numbers satisfy the 6 – orthogonal sums so that each row and column sums are equal to 12996---- 114×114 **114.....Perfect Sphere**



114 and Complete Perfection

114 th	Prime Number	619
114 th	Odd Number	227
114 th	Even Number	226

 114^{th} (Prime + Odd + Even) = 619 + 227 + 226 = 1072

$1072 = 67 \times 16$

67.....**19th** Prime Number **16**......9th Even Number
114 and Complete Perfection 58...... $5 + 8 = 13....6^{\text{th}}$ Prime No. 100th Prime Number ---- 541 42nd Prime Number ----- 181 100^{th} Prime – 42^{nd} Prime = 541 - 181 = 360100 - 42 = 58.....36058 ----- 30th Even Number 30 ------ 19th Composite Number



114 and Perfect link with 6 and 19 (Cont...)

1-----1st Odd Number

6 is the 1st Perfect Number.

19 - 1 + 9 = 10 = 1 + 0 = 1...Root Number of 19

11----- 5th Prime Number 11----- 6th Odd Number

11......5th Prime Number x 6th Odd Number

114 and Perfect link with 6 and 19 (Cont...)

14 - 1 = 13

13.....6th Prime Number 19 - 6 = 13

14 = 6 + 8 ... All Perfect Numbers end with 6 or 8.

6 ... 1st Perfect Number --- Perfect Diameter 19 ... 8th Prime Number --- Perfect Circumference

14 ----- is the reversal of 41

41 ----- 13th Prime Number

19 - 6 = 13

114 and Perfect link with 6 and 19 (Cont...)

$11 \times 4 = 44$

- 44...... 4 + 4 = 8
- 19-----8th Prime Number
- 19 8 = 11.....**6th** Odd Number
- 11 4 = 7.....Perfect Eternal Number
- 7.....1+6=7
- 17.....7th Prime Number
- 17 + 7 = 24

$360 = 24 \times (1 + 14) = 360$

114 x 114 = 12996 and Perfect Sphere - 114 A) 12996.....1 + 2 + 9 + 9 + 6 = 27

27...... 3 x 3 x 3 3.....Perfect Radius of a Perfect Sphere

B) 19 is the 8th Prime Number

C) 27......2 + 79

3.....Perfect Radius of a Perfect Sphere 6..... Perfect Diameter of a Perfect Sphere **114 and Prime Numbers**

$114 = 2 \times 3 \times 19$

2 ----- 1st Prime Number 3 ----- 2nd Prime Number 19 ----- 8th Prime Number

114 = 2 x 3 x 19 ---- (1st x 2nd x 8th)Prime = 16

114 ----- 16

16 is the reversal of 19

16.....19

114 and Number - 12 $12 \times 12 = 144$ $12 \times 30 = 360^{\circ}$ 144 – 114 = 30.....19th Composite Number 114 is the sum of 12 Numbers from 4 to 15 as: $114 = 4 + 5 + 6 + \dots + 12 + 13 + 14 + 15$ 4.....3rd Even Number **3----- Perfect Radius of a Perfect Circle** 15.....8th Odd Number 15....1 + 5 = 6**19-----8th Prime No. and Perfect Circumference** ----- Perfect Diameter of a Perfect Circle

19 and 58

Round numbers are numbers that, when factored, contain a large number of primes. The greater the number of prime factors, the rounder the number.

19 - 58 114 ----- 58th Even Number ----- 1st Prime Number 11 ----- 5th Prime Number 89 ----- 24th Prime Number $1958 = 2 \times 11 \times 89 = (1^{st} \times 5^{th} \times 24^{th})$ Prime = 120 $120 = 60 + 60 = (6 \times 10) + (6 \times 10) = 360/2$

14......8th Even Number

- 14th Prime Number---- 43

 14th Odd Number ---- 27
- 14th Even Number ----- 26
- 14×14 ------ 196....19 6
- 14 + 14 ------ 28.....2nd Perfect Number

14th Powerful Number ------ 100

 $14^{\text{th}}(\text{Prime} + \text{Odd} + \text{Even}) = 43 + 27 + 26 = 96$

14 x 14 ----- 196.....1 - 96

96 ----- 6 x 16

Ali Pi = 3.16.... and 6 ---- Perfect Diameter

225th Prime Number --- 1427

1427.....14 – 27......27 is the 14th Odd Number

1427..... 1 + 4 + 2 + 7 = 14

Ali Pi = 19/6

If we remove the 'Division symbol' - / from the fraction 19/6, we see:

Ali Pi -----19/6-----19 6

14 x 14----- 196

 80% of the numbers under 10,000 produce a palindrome in 4 steps or fewer. The first number to break the rule is 196. Starting with 196 and applying the rule again and again, you get larger and larger numbers but never get a palindrome. This has been tested on a computer by applying the rule more than 2 million times.

14 and Ali Pi - 19/6 14 x 14----- 196 **196th Prime Number – 1193** 1193 - - - 1 + 1 + 9 + 3 = 14 14^{th} (Prime + Odd) = 43 + 27 = 70 70...... $14 \times 5 = 70.....36^{\text{th}}$ Even Number $360 = 36 \times 10$

14 and Perfect Numbers

All Perfect Numbers end either with Number – 6 or Number – 8

Perfect Numbers: 6, 28, 496, 8128,

End Numbers in all Perfect Numbers - 6 or 8

6 + 8 = 14

68 ----- Perfection 86 ----- Perfection

14 ----- Perfection

4 x 4 Magic Square of 68

12	23	24	9
18	15	14	21
13	20	19	16
25	10	11	22

All rows, columns and diagonals add to 686+8=14

3 x 3 Magic Square of 68

<mark>22</mark>	<mark>28</mark>	19
20	23	25
26	18	24

All rows, columns and diagonals add to 686+8=14



4 x 4 Magic Square of 14



All rows, columns and diagonals add to 146 + 8 = 14

14 with 6 and 19								
6 = 1 + 2 + 3 = 6Sum of First - 3 Numbers								
6First and Smallest Perfect Number								
14 = 1 ²								
14 = 6 ·								
6 = 1 3	x 2 x 3 =	= 6 P	roduct	of Firs	st 3 - N	umbers		
14 = 1 ²	x 2 ² x 3 ²	36						
36			- 19 th E	ven N	umber			
36 = 1 -	+ 2 +	+ 7 + 8	= 36 S	um of F	irst 8 Nu	umbers		
19			8th	Prime	e Num	ber		

14 with 6 and 19

14 = 6 + 8

19 is the 8th Prime Number

If we write 19 instead of 8 in the above equation, we see:

14 ----- 6 + 8 ----- 6 + 19

14 ----- 25

- 14 - - 1 + 4 = 5
- $25 - 5 \times 5 - - 6 + 19$

14 x 14----- 196----- 196----- 19 - 6

14 and Perfect Facts

14 ---- Universe originated by a Big Bang – 14 Billion years ago

14 ---- Total Bones of a Human Face

14 ----Total Digital Bones of 5 Human Fingers

14 ---- On 14th Night , Moon looks Complete, Beautiful and Perfect

14 ---- Sum of Square of first 3 Numbers $-1^2 + 2^2 + 3^2 = 14$

14 ---- Cub Octahedron is a solid with 14 sides – 6 Squares + 8 Triangles

14 ---- 1st Prime Number x 4th Prime Number = $2 \times 7 = 14$

14 ---- Maximum Number of Regions in which a plane can be divided by 4 circles is 14

4 x 4 Magic Square of 14



All rows, columns and diagonals add to 148 + 6 = 14

7 and 14 7 ------ 4th Prime Number $7 + 7 = 4^{\text{th}}$ Prime Number + 4 Odd Number = 8 14.....8th Even Number $7 + 7 = 2 \times 7 = 14$ 2 --- 1st Prime Number 7 --- 4th Prime Number 27----14 714..... $2 \times 3 \times 7 \times 17 = 714$

1/7 and Cyclic Number

A Cyclic number – C is an integer that – when multiplied by any number from 1 to the number of digits of 'C' – always contains the same digits as 'C'. Also, these digits will appear in the same order but begin at a different point.

1/7 = 0.**142857**142857..... produces a

Cyclic Number – 142857

1/7 and Cyclic Number Cyclic Number – 14,28,57

 $1 \times 14,28,57 = 14,28,57$ $2 \times 14,28,57 = 28,57,14$ $3 \times 14,28,57 = 4,28,57,1$ $4 \times 14,28,57 = 57,14,28$ $5 \times 14,28,57 = 7,14,28,5$

14,28,57-----Contain 6 Numbers of 14 - 28 - 57 14 ----- 6 + 8 = 7 + 7 = 2 x 7-----Perfect 28 ----- 2nd Perfect Number = 14 + 14 57 ----- Perfect Hemisphere = 28.5 + 28.5



 $153 = 1^3 + 5^3 + 3^3 = 153$

153 = 1! + 5! + 3! = 153...Sum of its factorials

77 and 14

153.....77th Odd Number 153 $1 + 5 + 3 = 9 = 3^2$ -----9 is a perfect square of 3 The reversal Number of 153 is 351. Adding both numbers, **153.....17th Triangular Number** 153 = 3 x 51 ---- all 3 numbers in 153 153 ---- 3 x 3 x 17 --- 2nd Prime x 2nd Prime x 7th Prime --- 28 153 ----- (2 x 2 x 7) Primes ----- 28

28 -----2nd Perfect Number



77 and 5 x 5 Magic Square 77 ----- 39th Odd Number

39 Sum of all rows, colums and diagonals

39..... 3 x 9 = 27.....2 x 7 = 14 = 7 + 7



77 and 3 x 3 Magic Square of 39

77 ------ 39th Odd Number

39 Sum of all rows, colums and diagonals

39.....3 x 9 = 27.....2 x 7 = 14 = 7 + 7

 $\mathbf{18}$

Number – 27 and Perfect Circle 27.....14th Odd Number 27.... $2 \times 7 = 14 = 7 + 7$ 14 x 14 -----19-6 27 = 19 + 819.....8th Prime Number $27 = 3 \times 3 \times 3 = 3 \times 9 = 3 \times (3 + 6)$ ----- Perfect Radius **6** ------ Perfect Diameter **19** ------ Perfect Circumference

Number – 27 and Perfect Circle 103......27th Prime Number 52......27th Even Number 53.....27th Odd Number 27th Prime No. + 27th Odd No. + 27th Even No. = 103 + 52 + 53 = 208 208......105th Even Number ------ 1 + 0 + 5 = 6..Perfect No. 27th Even Number + 27th Odd Number = 52 + <u>53</u> = **105** $208 \dots 13 \times 16 = 208$ 105.....53rd Odd Number 53......27th Odd Number

100......**51st** Even Number

 100th Prime Number ----- 541

 100th Odd Number ----- 199

 100th Even Number ----- 198

 100^{th} (Prime + Odd + Even) = 541 + 199 + 198 = 938

938 67 x 14

67..... 19th Prime Number 14...... 8th Even Number

100.....198th Even Number

198.....19 – 8

19......8th Prime Number

19 + 8.....**27**

27.....14th Odd Number

Perfect Numbers and 6 and 19

100.....198th Even Number

198.....19 – 8

19......8th Prime Number

19 + 8.....**27**

27.....14th Odd Number

Speed of Light and Universal Perfection of 114 Speed of Light is Perfect in 3 aspects: constant speed in our Universe 1. **Fastest speed** in our Universe 2. Travels in a straight line through space 3. Speed of Light -- 186,000 miles/second <mark>6 Num</mark>bers in - 186,000 **6----- Perfect Diameter of a Perfect Sphere 3** Zero's in - 186,000

3----- Perfect Radius of a Perfect Sphere
Speed of Light and Universal Perfection of 114 Speed of Light - 186,000 miles/second Root Number of 186,000 is calculated as: 186 + 0 + 0 + 0 = 186**186----- 1 - 86** 1 - (8 + 6) - 1 - 14 $1 \rightarrow 14$ **114** ----- **6 x 19** = **1** + **1** + **4** = **6**

4 x 4 Magic Square of 86

17	27	<mark>28</mark>	14
22	20	19	25
18	24	23	21
29	15	16	26

All rows, columns and diagonals add to $\mathbf{86}$

Speed of Light and Universal Perfection of 114

All the Perfect Numbers in mathematics end either with Number – 6 or Number – 8

8 + 6 = 14

The Root Number of all Perfect Numbers except Number – 6 is Number – 1

1 ---- Root Number of all Perfect Numbers except Number – 6

1 and 8 and 6 are representing Perfection of all Numbers

1 - (8 + 6) = 1 - 14 = 114



Speed of Light and Universal Perfection of 6 and 19

Speed of Light - 300,000 Kilometers/second Speed of Light - 186,000 miles/second

Speed of Light is a multiple of Number - 6

Speed of Light = 6 x 50,000 = 300,000 Km/Sec Speed of Light = 6 x 31,000 = 186,000 Miles/Sec

6 ----- 1st and Smallest Perfect Number

6----- Perfect Diameter of a Perfect Sphere

Perfect Numbers and 114

114 = Surface Area of a Perfect Sphere = Volume of a Perfect Sphere

- 114 may be represented as------ 1 14.
- Relation between Perfect Numbers and Number 14

14 = 6 + 8

We know that all 'Perfect Numbers' in mathematics end with only two digits i.e. 6 and 8.

6.....ending digit in perfect numbers

8.....ending digit in perfect numbers.

Perfect Numbers and 114

If we add these two numbers, we would get:

6 + 8 = 14.....Even Number

- So Number 14 is the sum of the ending digits in all the perfect numbers in mathematics.
- Also Number 28 is the 2nd smallest Perfect Number in mathematics.

Number – 28 = 14 + 14 = 28

28 = 2nd smallest perfect number in mathematics

$$14 = 1 + 4 = 5$$

Undisputed 3.1.... in Pi and 31

The Undisputed first 2 numbers in all calculations of Pi are:

Pi = 3.1.....

31......11th Prime Number

 $31 \dots 6 + 19 + 6 = 31$

31 is the reversal of **13**

13 is the reversal of **31**

- 13-----6th Prime Number
- 13-----7th Odd Number
- 13......6th Prime No. + 7th Odd Number = 13
- 13 x 13-----169
- 31-----11th Prime Number
- 31-----16th Odd Number
- 31-----11th Prime No. + 16th Odd Number = 27
- 31 x 31.....961

169 is the reversal of **961**

13 x 13 ----- 169 31 x 31 ----- 961

169 and 961 contain 3 numbers – 1, 9 and 6 which are same in 19 and 6 as: 1, 9 and 6

13th Prime Number ----- 41 31st Prime Number ----- 127

Adding 13th Prime No. + 31st Prime No. = 41 + 127 = 168

168.....1, 6 and 8

All Perfect Numbers end either with 6 or 8 and the root numbers of all Perfect Numbers is 1 except Number – 6.

13th Odd Number ----- 25 13th Prime Number ---- 41 13th Even Number ----- 24

 13^{th} Odd No. + 13^{th} Prime Number = 25 + 41 = 66

25 + 41 = 66

13th Prime No. + 13th Odd No. + 13th Even No. = 41 + 25 + 24

41 + 25 + 24 = 90

 $360^\circ = 90 \times 4 = 360^\circ$

31st Odd Number ----- 61 31st Prime Number ---- 127 31st Even Number ----- 60

 31^{st} Odd No. + 31^{st} Prime Number = 61 + 127 = 188

$188.....95^{th}$ Even No.= $19 \times 5 = 95$

31st Prime No. + 31st Odd No. + 31st Even No. = 127 + 61 + 60

127 + 61 + 60 = 248

 $248 = 31 \times 8$

19 is the **8th** Prime Number

- 31st Prime Number 127 13th Prime Number – 41
- 31st Prime No. 13th Prime No = 127 41 = 86
- 13 + 31..... 44
- 44.....23rd Even Number
 23.....9th Prime Number
- 86.....Contain both the ending numbers of Perfect Numbers – 8 and 6.
- 31 13 = 18
 18.....10th Even Number

 $360^\circ = 18 \times 20 = 360^\circ$

31st Even Number – 60 13th Even Number – 24

31st Even No. – 13th Even No = 60 – 24 = 36

36.....19th Even Number

 $360^\circ = 36 \times 10 = 360^\circ$

10......6th Even Number

 $360 = 36 \times 10$ ----- 19^{th} Even No. x 6^{th} Even No.

360 ----- 114

```
31<sup>st</sup> Odd Number – 61
13<sup>th</sup> Odd Number – 25
```

31st Odd No. – 13th Odd No. = 61 – 25 = 36

 $360^\circ = 36 \times 10 = 360^\circ$

• 31^{st} Odd No. + 13^{th} Odd No. = 61 + 25 = 86

86 = 100 - 14

86..... **8** + 6 = **14**

86 contain both the Numbers – 8 and 6, which are the only ending numbers in Perfect Numbers.

14......8th Even Number

19...... 8th Prime Number

366 Days of the Year and 6 and 19

366 Days ----- 1 Year (Leap Year)

If we analyze the Number – 366 with 2 aspects as:

- **366 ----- 3 66 3 x 66 = 198 366 ----- 36 - 6 36 x 6 = 216**
- 216 ... 6 x 6 x 6
- **216 -----Area/Volume of Perfect Cube**

6 ----- Perfect Side and Diameter of Perfect Cube and Perfect Sphere

 ------ **100th Even Number** ----- **19 is the 8th Prime Number** ------ Perfect Circumference of Perfect **Sphere** 66 and Perfect Circle of 360°

66..... 33 Odd Numbers below 66

66..... 33 Even Numbers below 66

66 = 33 + 33

66.....(33 Odd Numbers + 33 Even Numbers) below 66 = 66

66..... 18 Prime Numbers below 66

$360^\circ = (6 \times 7 \times 7) + 66 = 360^\circ$ $360^\circ = 18 \times 20 = 360^\circ$

Number – 114

one hundred [and] fourteen	
114 th	
$2 \cdot 3 \cdot 19$	
2,3,6,19,38,57	
CXIV	
1110010	
72	

Definition of 114

1.14 - One hundred and fourteen is the only perfect constant surface area or perfect constant volume of a perfect sphere or perfect sphere of expanding Universe.

"I imagine that whenever the mind perceives a mathematical idea, it makes contact with Plato's world of mathematical concepts.....When mathematicians communicate, this is made possible by each one having a direct role to truth, the consciousness of each being in a position to perceive mathematical truths directly, through the process of 'seeing'."

Roger Penrose

Super – Cycle – 361 and Ali Pi

Now if we look at the number - 361 which is the result of the multiplication of 19 x 19 -- super cycle. It contains all the three numbers in the Pi - 3.16....

19 x 19 = 361

and

Pi = 3.16....

3 -- represents Perfect Radius of a Perfect Sphere or Perfect
 Circle.
 6 -- represents Perfect Diameter of a Perfect Sphere or Perfect
 Circle

1 --is the numerical root of 10 (10 = 1 + 0 = 1), which represents the Perfect Circumference of a Perfect Sphere or Perfect Circle.

■ So both the numbers of 19 x 19 – super cycle and Pi – 3.16.. Matches

361 of Super Cycle and 3.16.. of Ali Pi

Secondly, if we add two separate numbers in Pi – 3.16.....

3 + 16 = 19

Super Rotation - 360 and Pi Number

Now if we look at the number - 360 which is the result of the multiplication of 6 x 6 x 10 -- super rotation. It contains all the three numbers in the Ali Pi - 3.16.....

$6 \times 6 \times 10 = 36 \times 10$ and Pi = 3.16....

3 -- represents Perfect Radius of a Perfect Sphere or Perfect Circle

6 -- represents Perfect Diameter of a Perfect Sphere or Perfect Circle

10 --is the numerical root of 10 (1 + 0 = 1), which is the same root number of 10 (10 = 1+0 = 1) and it represents the Perfect Circumference of a Perfect Sphere or Perfect Circle

 So both the numbers of 6 x 6 x 10 – super rotation and Ali Pi – 3.16..... matches

360 - (36 x 10) of Super Rotation and 3.1 of Pi.

Perfect Hemisphere 57 – Perfect Area and Volume of a Hemisphere

57= 5 + 7 = 12 = (1 + 2) = 3 - Perfect Constant Radius

> 114 = 57 + 57 $114 = (19 \times 3) + (19 \times 3)$

Number – 57

Cardinal	Fifty Seven	
Ordinal	57 th	
Factorization	$3 \cdot 19$	
Divisors	1,3,19,57	
Roman Numeral	LVII	
Binary	111001	
Hexadecimal	39	

57 Even Numbers below 114

There are 57 Even numbers below the Even Number – 114 and Number – 57 is also the half of the Number – 114 and 57 represents the 'Perfect Hemisphere' i.e. half of the 'Perfect Sphere'.

114/2 = 57

57 = Total Even Numbers below Number – 114

57 Odd Numbers below 114

There are 57 Odd numbers below the Number 114 and Number – 57 is also the half of the Number – 114 and 57 represents the 'Perfect Hemisphere' i.e. half of the 'Perfect Sphere'.

114/2 = 57

57 = Total Odd Numbers below Number – 114

57 Even + 57 Odd Numbers below 114

There are 57 Even and 57 Odd numbers below the Number 114 and Number – 57 is also the half of the Number – 114 and the 'Perfect Hemisphere' i.e. half of the 'Perfect Sphere'.

57 Even + 57 Odd = 114

57.....Perfect Hemisphere

4 x 4 Magic Square of 57



All rows, columns and diagonals add to 57114/2 = 57

57 and Prime Numbers

Prime Factors of 57 = 19 x 3

 $57 - (2^4)$ and $(57^57) - (2^4)$ is a prime.

[57 x (2^25)] - 1 is prime.

 $(100 \times 2^n) + 57$ are primes for n = -1, 0, 1, 2, 3, 4 & 5.

19 and 57

Round numbers are numbers that, when factored, contain a large number of primes. The greater the number of prime factors, the rounder the number.

19 - 57 $1957 = 19 \times 103$ **19** ------ 8th Prime Number 19 + 8 ----- 27 103 ----- 27th Prime Number 1957 ----- 19 x 103 --- (8th x 27th)Prime 1957 ----- 216 ----- 6 x 6 x 6 ---- Perfect Cube Perfect Hemisphere = 19 x Radius of a Perfect Sphere

57 – Perfect Area and Volume of a Hemisphere

57 = 19 x Radius of a Perfect Sphere = 19 x 3 = 57 114 = 57 + 57114 = (19 x 3) + (19 x 3) Perfect Hemisphere – 57 and Perfect Number - 28

57 ---- 28 Odd Numbers below – 57

28 ---- 2nd Perfect Number = **14** + **14**

All Perfect Numbers end Either with 6 or 8

Ending Numbers of Perfect Numbers = 6 + 8

6 + 8 = 14....1 + 4 = 5

57/2 = 28.5.....Perfect Area of a Perfect Circle

Perfect Hemisphere – 57 and Perfection of 100

100 means -----Perfection and Completion

100 - 57 = 43

43.....14th Prime Number

14 + 14 = 28....2nd Perfect Number

14 x 14 = **196**.....contain both 19 and 6

100 + 14 = 114.....Perfect Area and Volume of a Perfect Sphere Perfect Hemisphere – 57 and Perfection of 100 100 + 57 = 157

37.....**12th** Prime Number

 $37 + 12 = 49 = 7 \times 7$ and 7 + 7 = 14

157 - 114 = 43

43..... 14th Prime Number

43 + 14 = 57.....Perfect Hemisphere

Perfect Hemisphere – 57 and Perfection of 100 100 + 57 = 157

157th Prime Number ---- 919

91 is the reversal of 19

157 - 114 = 43

43-----14th Prime Number

157 ----- 1 + 57 = 58 114 ----- 58th Even Number

911 – Most Famous Number of **World and Perfect Hemisphere** 911 ----- 156th Prime Number 156 - - - - 1 + 56 = 5757..... Perfect Hemisphere 911 is the reversal of 119 7-----4th Prime Number 17-----7th Prime Number 119----- 7 x 17-----(4th x 7th) Primes ----28 ------ 2nd Perfect Number

Perfect Hemisphere – 57 3 x 3 Magic Square

Kevin Brown made a 3 x 3 magic square of 57 x 57



 Remarkably, each row and column of this magic square sums to a square number – 3249

57 x 57 = 57² = 3249

 This 3 x 3 magic square of square numbers satisfy the 6 – orthogonal sums so that each row and column sums are equal to 3249----- 57 x 57

57.....Perfect Hemisphere
Definition of Number – 57

I define the Number – 57 as:

57 is the Only Perfect Hemisphere and half of the Perfect Constant surface area or perfect constant volume of a perfect sphere or perfect sphere of expanding

"All things began in Order, so shall they end, and so shall they begin again, according to the Ordainer of Order, and the mystical mathematics of the City of Heaven."

Sir Thomas Brown

Rotational Symmetry and Perfect Sphere

- The symmetry in which a shape can be turned about a fixed point or line and fit exactly onto itself is called rotational symmetry.
- Hence the "Perfect Sphere" has proved the rotational symmetry rule, so if we rotate the perfect sphere about any fixed point, it would fit exactly onto itself because the half of the perfect sphere is the mirror image of the other if we divide the "perfect sphere" in two equal parts from the center.
- 1. The order of rotational symmetry is the number of times within a revolution 360 degrees that a shape can be turned to fit exactly onto itself. So if we rotate the "Perfect Sphere" from the center point on a plane, it would fit exactly onto itself and would remain constant.
- 2. The axis of rotational symmetry is a line , which is a diameter of a "Perfect Sphere" which a Perfect Sphere can be rotated to fit exactly onto itself remains the same.

So "Perfect Sphere" fulfils the Rotational Symmetry rule also.

Perfect Sphere and Reflection Symmetry

- The Perfect Sphere also fulfils the requirement of 'reflection symmetry' or line symmetry.
- Reflection symmetry is in which "a shape can be divided into two parts by a line or plane, such that each part of the shape is a mirror image of the other"

So if we divide a Perfect Sphere into two (2) equal parts, the values would become:

Surface Area of 1st part = 57 Surface Area of 2nd part = 57

Volume of 1st part = 57 Volume of 2nd part = 57

4 x 4 Magic Square of 180

40	<mark>51</mark>	<mark>52</mark>	27
46	4 3	<mark>42</mark>	49
41	48	47	44
53	<mark>38</mark>	39	50

All rows, columns and diagonals add to 180 $360^{\circ}/2 = 180^{\circ}$ - Hemisphere

Perfect Sphere and Reflection Symmetry (Cont..)

- (Circumference x Diameter)/2 for 1st part = 57
- (Circumference x Diameter)/2 for 2nd part = 57
- All figures are showing symmetry in all dimensions
- Area of 1st part = 57 = Volume of 1st part = Circumference x Diameter of 1st part

57 = 57 = 57

 Similarly for 2nd part, the same number for surface area, volume and the value of circumference multiply by the diameter.

 Area of 2nd part =57 = Volume of 2nd part =Circumference x Diameter of 2nd part

57 = 57 = 57

Irrational Pi and Symmetries in Circles and Spheres

It is impossible to have Perfect

Rotational Symmetry or

Reflection Symmetry

In Circles or Spheres with irrational Pi as if we divide the Area calculated with Irrational Pi, we would get the Irrational Area and Irrational Volume of Spheres and with Irrational Area and Volume, we can't have Perfect Symmetries in Circles and Spheres

Root of Perfection for 1000 years





This value of Pi was widely accepted and remained in use for more than 1000 years in most part of the world.

Perfect Value of π – 10° away

- Hon Han Shu calculated Pi = $\sqrt{10}$ In 130 AD
- Brahmagupta calculated Pi = $\sqrt{10}$ In 640 AD
- Had they calculated the value of Pi with the addition of 10°, they would have got the perfect value of Pi at that time.
- Perfect Ali Pi = $\sqrt{10 + 10^\circ}$

 $=\sqrt{10} + 0.0277....$

Perfect Root of Absolute Perfection

Value of Pi by taking square root of Number – 10 and 10°

1. Hon Han Shu = $\sqrt{10}$ = 3.16227766.... 130 AD

2. Brahmagupta = $\sqrt{10}$ = 3.16227766.... 640 AD

And finally the 'Perfect Ali Pi' is discovered and introduced by:

3. Syed Abul Hassan = $\sqrt{(10 + 10^\circ)}$

= **3.16**666... 16th Mar, 2007

Perfect Value of π and Wang Fan Pi in 250 AD

Wang Fan calculated the value of Pi in 250 AD as:

Had he calculated the value of Pi by taking these values, he would have got the exact and perfect value of Pi as:

Ramanujan and Hobson Squaring the Circle and Ali Pi

Among the approximate correct constructions to square the circle was done by Hobson in 1913. This was a good estimate construction. More interestingly, was the ruler and compass constructions published by Srinavasa Ramanujan. In the journal of the Indian Mathematical Society in 1913 in a paper named, 'Squaring the circle', Ramanujan gave an approximate value of pi equal to 355/113, which differs from the accepted value only in the seventh decimal place. He finished his paper with the remarks:

"If the area of the circle be 140,000 square miles, then the side of the square is greater than the true length by about an inch."

Had he calculated the value of Pi by taking these values, he would have got the exact and perfect value of Pi as:

Perfect Ali Pi = 361/114 = 3.1666666666666.....

Pi calculated in history as **3.16**.....

 π = Circumference/Diameter of a circle



Egyptian Scribe Ahmes = 256/81 - First Value of Pi= $3.16049 \dots 1650 BC$

- □ Hon Han Shu = $\sqrt{10}$ = **3.16**2277 ... 130 AD
 □ Brahmagupta = $\sqrt{10}$
 - $= \sqrt{10}$ = **3.16**2277 ... 640 AD

Syed Abul Hassan-Ali pi = $\sqrt{10 + 10^{\circ}}$ = **3.16666**.... 2007 AD

Infinite Perfection of ALI PI

Ali Pi = 3.166666666....

Infinite digit '6' - Perfect Number in mathematics

"Mathematics is the science of what is clear by itself."

Carl Jacobi

Ali Pi Scale

 Ali Pi is 100% Correct Scale for all Formulae and Calculations.

Pi - Circumference/Diameter of a Perfect Circle

Pi = Circumference/Diameter

Pi = 19/6

Ali Pi = 3.166666666666.....

Sun – A burning sphere

And Circumference of a Perfect Sphere = 19

Diameter of a Perfect Sphere = 6



Existence of a Perfect Sphere

There is **no** perfect sphere in our universe **except 1** perfect sphere with radius – 3, diameter – 6, circumference – 19, surface area – 114, volume – 114 and perfect Pi – 3.1666666.....

Perfection = 1 = Exception

Exception proves the law and existence of a perfect sphere.

Ali Pi = 3.166666666......

Phase 6

Perfect Pair of Ali Pi

6 - Mathematical Relationships between 6 and 19

1. 19 + 6 = 25 = 2 + 5 = 7 - `Perfect Eternal Number of the Universe.'

2. 19 – 6 = 13 – 'Perfect Mysterious Number of the Universe.'

3. 19 x 6 = 114 - ' Perfect Area or Volume of a Perfect Sphere' 6 - Mathematical Relationships between 6 and 19(Cont...)

4. 19/6 = 3.1666......'Perfect Constant Ratio of Circumference and Diameter of a Perfect Sphere and a Perfect Circle.'

5. 19 x 19 = 361 --- 'Perfect Super Cycle of All New Perfect Circles.'

6. 6 x 6 x10= 360 -- 'Perfect Super Rotation of All New Perfect Circles.'

Ali Pi = $\sqrt{(19 \times 19)}$ (6 x 6)

Ali Pi = 3.16666666666666.....

Relationship between 6th Even Number and 19th Even Number Ven Numbers:

10 x 36

0, 2, 4, 6, 8, **10**, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30, 32, 34, **36**, 38, 40.....

6th Even Number = 10 19th Even Number = 36

Now if we see the **figures 10 and 36** carefully, we would see that both figures are the Numbers used in the circle and sphere.

> 10 – 6th Even Number 36 – 19th Even Number

Relationship between 6th Even Number and 19th Even Number (Cont..)

 If we multiply the 6th Even Number with the 19th Even Number, we would get the amazing result

$6 \times 19 = 114$

Perfect Surface Area or Volume of a Perfect Sphere.

$10 \times 36 = 360$

Perfect Total Degrees in a Perfect Sphere or a Perfect Circle.

 So when we multiply the figures of 6th Even Number – 10 and the 19th Even Number - 36, we get the 'Perfect Circle and Perfect Sphere of 360 degrees.

19 and 6 and the Powerful Numbers

A powerful number is a positive integer m that for every prime number p dividing m, p2 also divides m.Equivalently, a powerful number is the product of a square and a cube, that is, a number m of the form

$m = a^2 b^3$

- Powerful numbers are also known as square-full, or 2-full.
- The following is a list of all powerful numbers between 1 and 1000:

1, 4, 8, 9, 16, **25**, 27, 32, 36, 49, 64, 72, 81, 100, 108, 121, 125, 128, **144**, 169, 196, 200, 216, 225, 243, 256, 288, 289, 324, 343, 361, 392, 400, 432, 441, 484, 500, 512, 529, 576, 625, 648, 675, 676, 729, 784, 800, 841, 864, 900, 961, 968, 972, 1000.

19 and 6 and the Powerful Numbers (Cont..)

- 6th Powerful Number in mathematics is Number 25
- 19th Powerful Number in mathematics is Number 144
- If we multiply: 6 x 19 = 114
- Similarly if we multiply:

$25 \times 114 = 3600 = 360 \times 10$

Where 114 = Surface Area and Volume of a Perfect Sphere

 $3600 = 360 \times 10$ = 360° - total degrees of a circle multiplied by 10.

Relationship between 6th Prime Number and 19th Prime Number

Prime Numbers:

2, 3, 5, 7, 11, **13**, 17, 19, 23, 29, 31, 37, 41, 43, 47, 53, 59, 61, **67**, 71, 73.....

6th Prime Number = 13 19th Prime Number = 67

Now if we see the figures 13 and 67 carefully, we would see that both figures are the same in root number.

136th Prime Number

67 = 6 + 7 = 13.....6th Prime Number 13 + 6 = 19

Relationship between 6th Prime Number and 19th Prime Number (Cont..)

 So basically Number – 13 is the root number of both the 6th Prime Number and 19th Prime Number.

- Also ... 19 - 6 = 13

which is the 6th Prime Number and the root number of Number – 67, which is the 19th Prime number.

13 ^ **2** = **169**

The reversal of 13 is 31 31 ^ 2 = 961

The reversal of 169 is Number – 961

169 and 961 both contains the numbers of - 1, 9 and 6

Link of 19 and 6 – in Lagrange's theorem

■ The square root of number -19 has the continued fraction expansion...

 $\sqrt{19} = 4 + \frac{1}{2} + \frac{1}{1} + \frac{1}{3} + \frac{1}{1} + \frac{1}{2} + \frac{1}{8} + \frac{1}{2} + \frac{1}{1} + \frac{1}{3} + \frac{1}{1} + \frac{1}{3} + \frac{1}{1} + \frac{1}{2} + \frac{1}{8} + \frac{1}{2} + \frac{1}{1} + \frac{1}{1} + \frac{1}{3} + \frac{1}{1} + \frac{$

And it recurs with length – Six – 6.

 The Convergent immediately before the point from which it repeats is 170/39 and Lagrange's theorem will be the smallest solution to Pell's equation.

X= 39 and Y = 170

Pell's equation: 19(x * x) + 1 = (y * y) ... [where *= multiply]

Amazing Perfect Root of 6

$\sqrt{6} = \sqrt{1 + \sqrt{-3}} + \sqrt{1 - \sqrt{-3}}$

Leibniz discovered this formula which perplexed the world's great mathematicians.

Root of 6 contain 2 numbers 1 and 3 1 – 3 ----- 13......6th Prime Number

13 + 6 = 19

Number – 6 and Number – 19 ---Relationship in Multiplication

Number – 6 and Number – 19 --- Relationship in Multiplication:

A) When Number – 6 is multiplied with Number – 6 -- 6 times, we would get:

$6 \times 6 \times 6 \times 6 \times 6 \times 6 = 46656$

The root number of Number – 46656 is Number – 27 as:

46656 = 4 + 6 + 6 + 5 + 6 = 27.....A

Number – 6 and Number – 19 ----Relationship in Multiplication (Cont..)

B) When Number - 19 is multiplied with Number - 19 ----6 times, we would get:
 19 x 19 x 19 x 19 x 19 x 19 x 19 = 47045881

 The root number of Number – 47045881 is Number – 37 as: 47045881 = 4 + 7 + 0 + 4 + 5 + 8 + 8 + 1 = 37......B

When we multiply the root number of equation – A with the root number of equation – B, we would get another amazing number -999 as:

27 x 37 = 999.....C

The root number of 999 is again Number – 27 which is the root number of the multiplication of Number – 6 --- 6 times as: 999 = 9 + 9 + 9 = 27.....D

Number – 6 and Number – 19 ----Relationship in Multiplication (Cont...)

The root number of Number – 27 is Number – 9 as:

27 = 2 + 7 = 9

- Also if 1 degree = 1/360
 = 0.0027.....
- The first two numbers of the value of 1 degree is also Number –
 27.
- Also if we write the two numbers 27 and 37 together as 2737, we see
 2737 = 2736 + 1
- 2736 is divisible by Number 19 and the result would be Number – 144 as:

 $2736 + 1 = (2736/19) + 1 = 144 + 1 = (12 \times 12) + 1$

Area of Squares and the Relationship between 6 and 19

The Area of a Square is written as:

A = square of a side of a square = a x a where 'a' = side of a square

- Square has 4 equal and identical sides and let one side of a square is denoted by `a'.
- So A = (square of `a') = a²
- Take two Squares of different sides.

One square of equal sides of - 6 and Second square of equal sides of - 19



Area of Squares and the Relationship between 6 and 19 (Cont..)

The only addition is the Number 1 after 36 in the calculation of Area of Square with equal sides of - 19. And Number – 1 is basically the root number of Number – 19 as:

19 = 1 + 9 = 10 = 1 + 0 = 1

Area of Square with Side – 6 = 36 Area of Square with Side – 19 = 361

Relationship of Cubes with equal sides of 6 and 19

Take two cubes of equal sides of 6 and Second cube of equal sides of – 19

<u>Cube of equal sides of Number – 6:</u>

Area of Cube with equal sides of $-6 = 6 \times (6 \times 6)$ = 216

A = 2166

A = 216

<u>Cube of equal sides of Number – 19:</u>

Area of Cube with equal sides of - 19=6x(19 x 19) = (19 x 19) x 6 = 2166

Relationship of Cubes with equal sides of 6 and 19(Cont..)

- Now if we compare the Area of both Cubes with different sides of - 6 and - 19, we see that the Area of Cube with Side - 6 is 216 and the Area of Cube with Side - 19 is 2166.
- The only addition is the Number 6 after 216 in the calculation of Area of Cube with equal sides of 19.
- Area of Cube with Side 6 = 216
 Area of Cube with Side 19 = 2166

Ali Pl – and 19

The Number – 19 can be written as the sum of two numbers – 1 and 9

19 = 1 + 9 = 10

"Whoever despises the high wisdom of mathematics nourishes him self on delusion and will never still the sophistic sciences whose only product is an eternal uproar."

Leonardo da Vinci
Calculation of Ali Pi using 361 and 36

Perfect Ali Pi = 3.16666666666.....

1° and 360° with Ali Pi Numbers

1° = 1/360° = 0.00277777777....

Number 7 is infinite in 27777.....

27777777.....

$360^\circ = 360/360^\circ = 1$

In geometry, the value of 360° circle is 1,

If we subtract value of **infinite Circles of 1** - **1111111...** from infinite number **277777...... of 1°, we see:**

(277777777.....) – (11111111.....)

The Same and Exact Number is repeating in Ali Pi after 3.

Perfection of Ali Pi

Perfect Ali Pi = 3.16.....

3 + 16 = 19

Perfection of Ali Pi Number - 19

Amazing Results with Ali Pi

- 6pi = 19.00 --- Perfect Circumference of a Perfect Circle or Perfect Sphere
- 9pi = 28.5 --- Perfect Area of a Perfect Circle
- 12pi = 38.00 --- Circumference of a Circle
- 18pi = 57.00 --- Half the Area and Volume of a Perfect Sphere or Perfect Value of Hemisphere
- Pi/114 = 10° --- 10 degrees of a Circle
- 36pi = 114 --- Area and Vol. of a Perfect Sphere
- 180pi = 570 --- 10 times of Half the Area and Volume of a Perfect Sphere
- 114pi = 361 --- Super Cycle 19 x 19 = 361
- 1140/Pi= 360 Super Rotation 6 x 6 x 10 = 360

Rational and Definite values of Diameter and Circumference D = 12, $C = 38 = 19 \times 2$ D = 18, $C = 57 = 19 \times 3$ $C = 76 = 19 \times 4$ D = 24, $C = 95 = 19 \times 5$ D = 30, $C = 114 = 19 \times 6$ D = 36,D = 42, $C = 133 = 19 \times 7$ D = 48, $C = 152 = 19 \times 8$ $C = 171 = 19 \times 9$ D = 54, D = 60, $C = 190 = 19 \times 10$ $C = 209 = 19 \times 11$ D = 66,D = 72, $C = 228 = 19 \times 12$ $C = 266 = 19 \times 14$ D = 84,D = 90, $C = 285 = 19 \times 15$ $C = 361 = 19 \times 19$ D = 114,

Perfect Number – 6 as Infinite Number in Ali Pi

 Ali Pi = 3.16 (Perfect Number) 6 (Perfect Number)..... 6 (Infinite Perfect Number)

Ali Pi = 3.16 (Perfection) 6 (Perfection)

6(Perfection).....**6** (Infinite

Perfection)

"Numbers are intellectual witnesses that belong only to mankind."

Louis Lambert wrote in Honore De Balzac

Phase 7

Perfect Results with Ali Pi

Number Nine - 9 and the Circle

The Enneagram is one system of knowledge which shows the correspondence between the Nine - 9 integer and the circle.
 The 360 degrees of the circle, which can be trace back to the Rig Veda of Ancient India can also be seen to speak of the nine - 9 via theosophical addition.

$360^{\circ} \text{ degrees} = 3 + 6 + 0 = 9$

- 360° degrees represent the complete 'Perfect Circle'
- Two third (2/3rd) of a Perfect Circle = (2/3) x (360) = 270 degrees

$270^{\circ} \text{ degrees} = 2 + 7 + 0 = 9$

• Half (1/2) of a Perfect Circle = $(1/2) \times (360) = 180$ degrees

 $180^{\circ} \text{ degrees} = 1 + 8 + 0 = 9$

Number Nine - 9 and the Circle (Cont..)

One-fourth (1/4th) of a Perfect Circle = (1/4) x (360) = 90 degrees

90 degrees = 9 + 0 = 9

- Nine 9 basically represents two 'Perfect' numbers of 3 and 6 where 3 represents the 'Perfect Constant Radius' and 6 represents the 'Perfect Constant Diameter' of a Perfect Sphere or a Perfect Circle. And 9 is the 'last number' in numerals from 0 to 9.
- 9 = 3 (Perfect Radius) + 6 (Perfect Diameter)

Ali Pi = $(1/9) \times (28.5) = 3.1666....$

In the Perfect Area of 28.5, every 9th part of a circle is equal to

Ali Pi – 3.166666666666666......

1/9th Area of a Perfect Circle = Value of Ali Pi

Circumference of a Perfect Circle = 19 Diameter of a Perfect Circle = 6 Radius of a Perfect Circle = 3

Ali Pi = Circumference / Diameter of a Perfect Circle

 $1/9^{th}$ of the Area of a Perfect Circle = 28.5 x (1/9) = 3.16666..... 28.5 x (1/9) = 3.16666666.... = Ali Pi

1/9th Area of a Perfect Circle = Value of Ali Pi (cont..)

- Ali Pi = (1/9) x (28.5) = 3.16666.....
 Another proof of Ali Pi.
- So a Perfect Circle with an Area of 28.5, when divided into 9 equal parts gives every part equal to Ali Pi = 3.16666666..... or 19/6
- If we note the numbers carefully, we see that ratio 1/9 contains two numbers 1 and 9, which are the same in Number 19.

So both the numbers 1 and 9 are very important in the calculations of the Perfect Circle or Perfect Sphere

1/18th Part of a circle having Area of 57 is equal to the value of Ali Pi – 3.166666666......

1/18th Part of a circle having Area of 57 is equal to the value of Ali Pi 3.16666666666.....

Area of a circle = 57

- 1/18th Part of the Area of a Circle 57.0 and Ali Pi – 3.166666666666......
- 1/18th Part of the Area of a Perfect Circle
 - $= 57 \times (1/18)$

Ali Pi= 3.16666.....



1/36th of the Area of a Circle and Ali Pi

Radius = 6 Diameter = 12 Circumference = 38 Area of a circle = Pi x (radius)² = 19/6 x 6 x 6 = 114

 Divide the area of 114 into 36 equal pieces; Every piece would have an area equal to Ali Pi – 3.166666... or 19/6

1/36th of the Area of a Circle and Ali Pi (Cont..)

- 1/36th Part of Area of a circle = 3.1666... = 19/6



- Every 1/36th Part of = Equal pi with an area equal an Area of a circle to 3.16666666.... or 19/6
- If we note the numbers carefully, we see that ratio 1/36 contains three numbers 1, 3 and 6, which appear in Ali Pi after 3 as:

Ali Pi = 3.16.....

So both the numbers 1, 3 and 6 are very important in the calculations of the Perfect Sphere. Ali Pi using 36 and 10 36 x 10 = 360 Let Circumference of a Circle= 360

Diameter = 360 / π

Now we divide the circle into 36 equal parts of 10 degrees each

Ali Pi = $\sqrt{(19 \times 19)} / (6 \times 6)$ Ali Pi = $\sqrt{361/36}$ Ali Pi = $\sqrt{10 + 10^{\circ}}$

Ali Pi = 3.16666666666.....



Circle Divided into 36 equal parts of 10° each

Geometrical link between 114 and Rational Ali pi – 19/6

•/	We know that:	
	1 Circle	= 360 degrees
	1 degree	= 1/360
		= 0.00277777777

Ali Pi = 19/6 = 3.1666666666666666

■ If divide by 114 – Which is the area of a Perfect Sphere

Ali $Pi/114 = 0.0277777777777 = 10^{\circ}$

Geometrical link between 114 and Rational Ali pi – 19/6 (Cont..)

That is the exact value of 10 degrees of a Circle of 360 degrees (36 equal parts x 10°).

10° = **0.02777777777**.....

If we divide 114 by Ali Pi, we would get:

This exact value is coming only with the 'Rational and Real' value of Ali pi and cannot come with the approximate value of pi accepted today.

36 equal parts of 10° = 0.02777777 x 36 in a circle = 1 complete circle of 360°

1/36:Area and Volume of a Perfect Sphere and Ali Pi

1/36th of the Area of a Perfect Sphere
 114 and Ali Pi - 3.1666666666.....

1/36th of the Area = 114 x (1/36)
 of a Perfect Sphere = 114 x (1/6 x 6)
 = 3.16666666....





114 x (1/36) = 3.1666..... = Ali Pi

Ali Pi = (1/36) x Area of a Perfect Sphere (114)

1/36:Area and Volume of a Perfect Sphere and Ali Pi (Cont..)

 So a Perfect Sphere with an Area and Volume of 114, when divided into 36 (6 x 6) equal parts gives every part equal to
 Ali Pi = 3.166666

The Area and Volume of every 36th Part of a Perfect Sphere is equal to Ali Pi = 19/6 = 3.16666......

If we note the numbers carefully, we see that ratio 1/36 contains numbers 1, 3 and 6 which appear in Ali Pi after 3 as:

Ali Pi = 3.16.....

1/360 :Area and Volume of a Perfect Sphere and Ali Pi

- 1/360 Area and Volume of a Perfect Sphere and Ali Pi/10
- 1/360th of the Area of a Perfect Sphere 114 and Ali Pi – 3.166666.....
- 1/360th of the Area = 114 x (1/360)
 of a Perfect Sphere = 114 x (1/(6 x 6 x 10))
 = (3.16666666....)/10

114 x (1/360) = (3.16666666.....)/10 = Ali Pi

Ali Pi = (1/360) x Area of a Perfect Sphere (114)

= (3.1666666....)/10

1/360 :Area and Volume of a Perfect Sphere and Ali Pi (Cont..)

So a Perfect Sphere with an Area and Volume of 114, when divided into 360 (6 x 6) x 10 equal parts gives every part equal to (Ali Pi/10) = (3.166666...)/10

If we note the numbers carefully, we see that ratio 1/360 contains numbers 0,1, 3 and 6 which appear in Ali Pi as:

Ali Pi = 03.16.....

Perfect Numbers in Mathematics

- A Perfect Number in mathematics is defines as an integer which is the sum of its proper positive divisors, that is, the sum of the positive divisors not including the number itself. A perfect number is a number that is half the sum of all of its positive divisors.
- The first perfect number accepted in mathematics is Number –
 6, because 1, 2 and 3 are its proper positive divisors and 1 + 2 + 3 = 6.
- 1. Number 6.....First Perfect Number in Mathematics
- 2. The next perfect number is Number 28
- 3. The third perfect number is 496
- **4.** The fourth perfect number is **8128**

Perfect Numbers in Mathematics (Cont...)

These first four perfect numbers were the only ones known to the ancient Greeks.

- 5. The fifth perfect number is **33550336**
- 6. The sixth perfect number is 8589869056

The next perfect numbers are:

7. 137438691328
8. 2305843008139952128
9. 26584559915698317446546953842176

 All the Perfect Numbers end either with Number – 6 or Number -8

• If we add both the Numbers – 6 and 8, we get 6 + 8 = 14

$$14 = 1 + 4 = 5$$

Perfect Number 496 and Ali Pi The Number – 496 is the 4th Perfect Number in mathematics. If we see the equation closely, we would notice that 31 x 16 are the numbers appearing in the Perfect Ali Pi as: Ali Pi = 3.16..... The Number – 1 is common in both the Numbers 31 and 16, sow riting Number – 1 only one time, w ew ould see that 3, 1 and 6 are common numbers in Ali Pi and 31 x 16. Also the numeric sum or root number of Number – 496 is: 496 = 4 + 9 + 6 = 19

19 = Perfect Circumference of a Perfect Circle and a Perfect Sphere

The Number – 496 is the 4th Perfect Number having root number

Pi – A Number and Ratio Little over 3

- The mathematical and estimated values of Pi calculated or computed so far in the history of mankind and mathematics is in between 3.125 and maximum was 3.2.
- Let us take 6 Diameter of a circle to find the circumference and Pi of a circle simply without going into complex calculations.
- Diameter of a Circle = 6 Also a perfect number in mathematics

Pi = Circumference of a circle/Diameter of a Circle
C = Circumference of a circle
D = Diameter of a Circle
= 6 (A Perfect Number in Mathematics taken to check exact value of pi)

Pi – A Number and Ratio Little over 3 (Cont..)

- Pi = C/6 ---- Should be 'a little over 3' and its value should be in between 3.125 and 3.20 as calculated and computed by mathematicians through out history of mankind
- Pi = 17/6 = 2.8333..... Not to be considered because it is even less than 3.
- Pi = 18/6 = 3..... Not to be considered because it is equal to 3.

Pi – A Number and Ratio Little over 3 (Cont..)

- Pi = 21/6 = 3.5..... Not to be considered as it is much higher than 3.2.
- Pi = 23/6 = 3.8333333....Not to be considered as it is again a very bigger number.
- Pi = 24/6 = 4.0....Not the value to be considered for pi.

Pi – A Number and Ratio Little over 3 (Cont..)

- So even if check through a simple test by taking the Diameter of a circle as 6. The Only Ratio which fulfills our requirements is 19/6 or 3.1666666.... or 'a value of pi – little over than 3'.
- 18/6 gives exactly the Number 3. Then the first ratio after 18/6 is 19/6 which is 3.16666666.... a value little over than 3. Then 23/6 is 3.833333.... which is a bigger and higher number than 3.2 the maximum value of pi calculated by Mathematicians.

So 19/6 is the only 'Rational and Constant Ratio' in mathematics which fulfills the requirements.

Which Numbers Recur when One divided by first 10 numbers from 1 to 10 and what is their sequence?

Let us see the results and then judge which numbers or numerals recur when Number One- 1 is divided by first 10 numbers from 1 to 10.

1.1/1 = 1 $2_{1/2} = 0.5$ 3.1/3 = 0.3333333....(with 3 recurring) $4.\frac{1}{4} = 0.25$ 5.1/5 = 0.27.1/7 = 0.14285714..... (no one number or numeral is repeating). 8.1/8 = 0.1259.1/9 = 0.1111111....(with 1 recurring)10.1/10 = 0.1

Which Numbers Recur when One divided by first 10 numbers from 1 to 10 and what is their sequence? (Cont..)

- So it is quite clear that Numbers 3, 6 and 1 are recurring when One 1 is divided by 3, 6 and 9 subsequently.
- 3 Recurring Numbers : 3, 6 and 1

1.1/3 = 0.3333..... (with 3 recurring) 2.1/6 = 0.166666..... (with 6 recurring) 3.1/9 = 0.1111..... (with 1 recurring)

Any rational number which cannot be expressed as a decimal fraction has a unique infinite decimal expansion ending with recurring decimals.

Sequence of the Recurring Numbers 3-6-1 and 19

The sequence of the recurring numbers from 1 to 10 is 3, 6 and 1.

3 - 6 - 1

361 = 19 x 19 (Super Cycle)

 The sequence is very important. First Number 3 is recurring when 1 is divided by 3. Then 6 is recurring when 1 is divided by 6. Lastly 1 is recurring when 1 is divided by 9.

 When these 3 recurring Numbers are written in the same sequence and order, the resulting Number would be 361 which are equal to

361 = 19 x 19 --- Super Cycle

Recurring Numbers in Mathematics and Ali Pi

3 - Recurring Numbers : 3, 1 and 6

Perfect Ali Pi = 3.16.....

All the 3 – Recurring Numbers – 3, 1 and 6 appears in the Perfect Ali Pi with Number – 6 as infinite recurrence as 6 is a Perfect Number in Mathematics.

Mathematical Link of Ali Pi with 114 and 10° of a circle

If divide Pi by 114 – Which is the area of a Perfect Sphere.

Pi/114 = 0.027777.....

That is the exact value of 10° of a Circle of 360° (36 x 10)

10°= 0.0277777.....

 This exact value is coming only with the 'Rational and Real' value of Ali pi and cannot come with the approximate value of pi accepted these days.

 10°associated with 36 equal parts = 0.027777..... x 36 of a circle of 10° each = 1 complete circle of 360°

$36 \times 10^\circ = 360^\circ = [36 \times 10]^\circ$

Number – 411 is the reversal of Number - 114

- 411 is an odd number.
- The factorization of Number 411 would be:

411 = 3 x 137.....A

- If we notice the numbers carefully, we would see that Number 3 is the 2nd Prime Number and Number – 137 is the 33rd Prime Number.
- 411 = 2nd Prime Number (3) x 33rd Prime Number (137)
- 411 would be represented by Number 66
- 411----- 2nd Prime Number x 33rd Prime Number = 66
- 33rd Prime Number 137
- The root number of 137 is 11 as:

137 = 1 + 3 + 7 = 11..... 5th Prime Number

11 = 1 + 1 = 21st Prime Number

196 – 99th Even Number

19 – 6

If written as Number – 196.
 196 is the 99th Even Number

Number – 99 is a very important Number in many aspects.
 Some examples of Number – 99 are:

99 is the reversal of 66

Perfect Ali Pi and 666

666 appears in Perfect Ali Pi after 3.1666.....

Perfection of Number – 666

The number – 666 is equal to the sum of the squares of the first – 7 prime numbers:

 $666 = 2^2 + 3^2 + 5^2 + 7^2 + 11^2 + 13^2 + 17^2$

The exponents reflect the number – 666 and the bases are the first – 3 natural numbers:

$$666 = [(1^6) - (2^6)] + (3^6)$$

666 manifests itself as:

 $666 = 6 + 6 + 6 + 6^{3} + 6^{3} + 6^{3}$ $666 = (6 + 6 + 6)^{2} + (6 + 6 + 6)^{2} + (6 + 6 + 6)$ $666 = 1^{3} + 2^{3} + 3^{3} + 4^{3} + 5^{3} + 6^{3} + 5^{3} + 4^{3} + 3^{3} + 2^{3} + 1^{3}$
Perfect Ali Pi and 666

 360° (36° x 10) are the total and perfect degrees and now we see the relationship between 36 and 666:

666 = ½ x 36 x 37.....**36th** Triangular Number 666 = 1 + 2 + 3 +..... + 34 + 35 + **36**

666 is the sum of first 36 natural numbers.

666......6 x 6 x 6.....216

 216 represents the Perfect Cube as if all sides of the cube = 6, the Perfect Area = 216 and Perfect Volume = 216 of the Perfect Cube.

Perfect Ali Pi and 666

 A standard function in number theory is φ(n), which is the number of integers smaller than n and relatively prime to n. Amazingly we find that:

$\Phi(666) = 6.6.6$

There are 121 Prime Numbers below Number – 666

121 11 x 11

666 = 18 x 37

18 is the 10th Even Number 37 is the 12th Prime Number

666...18 x 37...10th Even Number x 12th Prime Number ...120

360°... 3 x 120°... 360°-- Perfect Degrees

6 x 6 Magic Square of 111

28	4	3	31	35	10
36	18	21	24	11	1
7	23	12	17	22	30
8	13	26	19	16	29
5	20	15	14	25	32
27	33	34	6	2	9

The Vertical, Horizontal and main diagonal lines add to 111

111 = 1 + 1 + 1 = 3

3.....Perfect Radius of a Perfect Circle or a Perfect Sphere.

 $666 = 6 \times 1/11$

3 x 3 Magic Square of Prime Numbers.....111

67	1	43
13	37	61
31	73	7

The Vertical, Horizontal and main diagonal lines add to 111

3 x 3 ... Magic square of all Prime Numbers yielding 111 from all sides.

$666 = 6 \times 111$

Source: (Dudeney 1917, problem 408) (Rouse Ball 1939, 211) Mathematical Recreations and Essays

666 - 999

666 and upside down number - 999
 The fraction 666/999 is the ratio of the smallest even and odd primes.

Ignoring the smallest square-congruent prime of order 5 is devilishly difficult!

Number - 999

The number 666 becomes 999 when written upside down.

Cardinal	Nine hundred [and] ninety-nine	
Ordinal	999th (Nine hundred [and] ninety- ninth)	
Factorization	$3^3 \cdot 37$	
Divisors	1, 3, 9, 27, 37, 111, 333, 999	
Roman numeral	CMXCIX	
Binary	1111100111	
Octal	1747	
Duodecimal	6B3	
Hexadecimal	3E7	

999 and 27 999 = 9 + 9 + 9 = 27

27 = 19 + 8

Number – 19 is the 8th Prime Number

$27 = 3 \times 3 \times 3$

3 ----- Perfect Radius of a Perfect Circle

 $1/360^{\circ}$ degrees = 0.0027.....

27 are the first two digits of 1 degree in decimals.

Lucky or Unlucky Number 19 - 6 = 13

Perfect Mysterious Number of our Universe - 13

"Geometry enlightens the intellect and sets one's mind right. All of its proofs are very clear and orderly. It is hardly possible for errors to enter into geometrical reasoning, because it is well arranged and orderly. Thus, the mind that constantly applies itself to geometry is not likely to fall into error. In this convenient way, the person knows geometry acquires intelligence."

Ibn Khaldun

Diabolic Magic Square with Numbers 1 to 16 and Ali Pi – 3.16.....

15	10	3	6
4	5	16	9
14	11	2	7
1	8	13	12

"The mathematical sciences particularly exhibit order, symmetry and limitation; and these are the greatest forms of the beautiful." Aristotle.

4x4 Magic Square of 16 Consecutive Prime Numbers

37	53	89	79
83	61	67	47
97	71	59	31
41	73	43	101

Source: (Giles Blanchette: Caldwell, Prime Pages)

4 x 4 Magic Square of 16 Consecutive Prime Numbers From 37 to 101.

The Vertical, Horizontal and main diagonal lines add to 258

258 = 2 + 5 + 8 = 15 = 1 + 5 = 6 --- Perfect Diameter

Compass Rose and 16



This compass rose is divided into **16 points**: north, north-north-east, north-east, east-north-east, east ... and so on. Old maps and charts often included a rose like this to show the compass directions.

Ali Pi = 3.16.....

3×3 Magic Square of $16 \times 16 = 256$



All rows, columns and diagonals add to 256 $16 \times 16 = 256$

Number – 7 and Perfect Circle If we see the numbers carefully, we see: 14 28 57.... is repeating infinitely in 1/7 $14....7 + 7 = 2 \times 7 = 14 \dots 1 + 4 = 5$ **28**..... **14** + **14****2**nd **Perfect Number** 57...... 28.5 + 28.5 Perfect Hemisphere Where **28**......2nd Perfect Number and **5**.....1 + 4 1/7 = 1/(1 + 6).....Perfect Eternal Number

Number – 7



I define the Number Seven - 7 as

7 - Seven is the Only Perfect Constant Eternal number because it is the sum of two perfect numbers - 1 and 6. One(1) is the only perfect Divine unity number of One and Only Almighty God and Six (6) is the only perfect Universal and mathematical number of universe, life, space, time and Mathematics.

7 = 1(Perfect Divine Unity Number) + 6 (Perfect Number)

7 = Perfect Eternal Number

"There is no branch of mathematics, however abstract, which may some day be applied to phenomenon of the real world."

Nikolai Lobatchevsky

Least Number in Mathematics Divisible by All Numbers from 1 to 10 $7 \times 360 = 2520$

- The least Number in Mathematics divisible by all Numbers from 1 to 10 is obtained by multiplying 360 with 7 is Number - 2520.
- Number 2520 is the Least Number in Mathematics which is divisible by all Numbers from 1 to 10.
 2520 = 360 x 7
- 7 = 1 + 6 1(Unity)+ 6(Perfect Number) = Perfect Eternal Number



 2520 --- Least Number in Mathematics divisible by all numbers (1 to 10) "We have given thee seven of the oft-repeated verses and the great Quran."

Holy Quran (15:87)

Symbolic Proof of Perfect Circle

We start with the fact that we don't know the circumference and Diameter of a Perfect Circle. Also we don't know even the circumference of a circle.

We Suppose: Circumference of a 360° Circle = 360

1° = 1/360 ° = 0.00277777..... 10° = 10/360° = 0.02777777....

 $36^{\circ} = 36/360^{\circ} = 0.1$ $360^{\circ} = 360/360^{\circ} = 1$

Now we add the **value of 360° as 1** with the assumed circumference of 360 of a circle to find the **geometric circumference of assumed circle**.

(Circumference of a 360° Circle) + (360°) = 360 + 1 = 361

Perfect Circumference is the square root of geometric circumference of assumed circle of 360°.

Perfect Circumference = $\sqrt{361}$ **=** 19

Symbolic Proof of Perfect Circle

Perfect Circumference = $\sqrt{361} = 19$

B. Now we divide the Circle with Circumference of 360 into 36 equal pies of 10 and 360° into 36 equal degrees of 10°

> **360 = 36 x 10.....Circumference** 360° = 36 x 10.....Total Degrees

36 Pies of 10 with a circumference of 360 would have 10° each geometrically.

The Geometric Value of each Pie of a circle = 10 + 10°

Perfect Pi is the square root of Geometric value of Pi of assumed circle of 360° as:

Symbolic Proof of Perfect Circle Now: Circumference = Pi x Diameter of a circle **Perfect Circumference = Perfect Pi x Perfect Diameter** Perfect Diameter = Perfect Circumference/Pi Perfect Diameter = $\sqrt{361}/\sqrt{10} + 10^{\circ} = \sqrt{36} = 19/3.16666... = 6$ Perfect Diameter = $\sqrt{36} = 6$

Symbolic Decoded Proof of Pi - 3.16.... through its own Numbers – 3, 1 and 6

 If we see the Perfect Constant Mathematical Value of Pi, it is giving the Proof in its value that it is a Perfect Value of Pi. We will see this proof of the Perfect Value of Pi now:

> Pi = 19/6 = 3.16.... Pi = 3.16....

Perfect Constant Value of Pi --- 3.16.....

3 represents --- the Perfect Constant Radius of the Perfect Sphere or Perfect Circle in the Perfect Value of Pi -- 3.16

- 6 represents ---- the Perfect Constant Diameter of the Perfect Sphere or Perfect Circle in the Perfect Value of Pi --- 3.16
- 1 represents -- the root number of 19- which is the Perfect Constant Circumference of the Perfect Sphere or Perfect Circle.

"The mathematician has reached the highest rung on the ladder of human thought."

Chronological Proof of Pi - 3.16..... through History of Pi since 2000 BC

 Egyptian Scribe Ahmes – First Ever Pi, 3.16049 Known in History

Chinese and Indian Historical Pi:

Then Hon Han Shu in 130 AD found the value of Pi by taking square root of 10 or **3.162277...** which is further closer to the Perfect Value of Pi - 3.16666......Then in 640 AD Brahmagupta found the value of Pi as square root of 10, or **3.162277....**

1. Rhind Papyrus-	1650 BC	3.16 0493 – 1st Value
2. Hon Han Shu	130 AD	3.16 2277 $\sqrt{10}$
3. Brahmagupta	640 AD	3.16 2277 $-\sqrt{10}$
Finally we get the F		
4 Svod Abul Hacca		3 166666 Ali Pi

Perfect Ali Pi – Represented in Numbers – 36 and 10

- The 'Perfect Ali Pi' may be represented by the Number 361, which is also the Super Cycle and first two digits contain 36 and the Number – 10.
- Perfect Ali Pi = $\sqrt{(361/36)}$
- Perfect Ali Pi = $\sqrt{[(19 \times 19)/(6 \times 6)]}$
- Perfect Ali Pi = $\sqrt{(10 + 10 \text{ degrees})}$
- Perfect Ali Pi = $\sqrt{[(10.0277777777....)]}$

Perfect Ali Pi = 3.16666666666666666.....

Phase 8

Perfect Squaring the Circle with Ali Pi

Squaring the Circle and π

"The Squaring of the Circle is of great importance to the geometer-cosmologist because for him the Circle represents pure, unmanifest spirit-space, while the Square represents the manifest and comprehensible world. When a near-equality is drawn between the circle and square, the infinite is able to express its dimensions or qualities through the finite."

Robert Lawlor, Sacred Geometry, 1982

Reference: The Joy of Pi by David Blatner; Pg-95

Circle and Square





Circle – Symbol of infinity

Square – Symbol of Finity

Perfect Circle is divided in 6 equal sectors of 60° 360° = 6 x 60° Perfect Square is divided in four equal sides of 90° 360° = 4 x 90°

 $6 \times 60^\circ = 360^\circ = 4 \times 90^\circ$

Secret of π in its alphabet and letters

- In the Greek alphabet, T is the 16th letter (and 16 is the square of 4). In the English alphabet, 'P' is also the 16th letter, and 'I" is the 9th letter (the square of 3).
- Add them up 16 + 9 and you get 25 (the square of 5).
- Multiply them (16 x 9), and you get 144 (the square of 12).
- Divide 9 by 16, any you get 0.5625 (the square of 0.75).
- It's no wonder that they say, "Pi are squared!"

Ali Pi – Squared or not?

 The numbers used in the Perfect Ali Pi are squared numbers or not? Let us see:
 Ali Pi = 19/6

> 19 + 6 = 25Square of 5 19 x 19 = 361Square of 19 6 x 6 = 36.....Square of 6 3 x 3 = 9Square of 3

114 x 114 = 12996.....Square of 114 57 x 57 = 3249Square of 57 19/6 = 3.1666666..... = $\sqrt{10 + 10^{\circ}}$ 10 + 10°Square of 19/6

And then subtract 6 from 10 10 - 6 = 4.....Square of 2

All the numbers of Ali Pi are showing that Ali pi is squared

Old Egyptian and Greek Mathematicians Dreams Come true now with Perfect Ali Pi

Squaring the Circle is Possible with Ali Pi :

 Taking the constant values of a Perfect Circle, Circumference = 19 Radius = 3

Diameter = 6

- Area of a Perfect Circle = Pi x (r x r)
 Area of a Perfect Circle = 19/6 x (3 x 3) = 28.5
- $\sqrt{\text{Area of a Perfect Circle}} = \sqrt{(28.5)} = \text{side of square}$
- The sides of a square are equal, so every side is equal to square root of 28.5 – which is a rational number.



Squaring the Circle With Ali Pi

Let the radius of a circle is taken as – 6 Then diameter of a circle – 12

- Using the 'Perfect Ali Pi' 3.166666666.... = 19/6 as 'Perfect real constant'.
- Circumference of a circle = 38
- Area of a Circle = Pi x (radius)²
 = Pi x (6 x 6)

= 114

114

Area of a Square = (side of a square x side of a square) with 4 equal and identical sides.

The side of a square is the square root of the 'Area' of a circle which is 114 in this case.



Squaring the Circle With Ali Pi has a Possible solution

- The squaring of a circle or constructing a square with the same area as a given circle by using only a finite number of steps with compass and straightedge is a solved problem
- The unsolved mystery, riddle or mathematical puzzle is finally solved by using the 'Perfect Ali pi'
- Ali pi is a Perfect, rational, constant, unique, universal and fundamental number used in all circles and spheres.

Ali Pi = 3.1666666666666666

Quadrature of Circle With Ali Pi

"The circumference of any circle being given, if that circumference be brought into the form of square, the area of that square is equal to the area of another circle, the circumscribed square of which is equal in area to the area of the circle whose circumference is first given."

John A. Parker, The Quadrature of the Circle, 1874

Reference: The Joy of Pi by David Blatner

Quadrature – Squaring the Circle and Ali Pi

Area = 36

- Suppose the area of the circle is 36
- Area of the circle = Pi x (r)² = 1/4 x Pi x (d)²
- Diameter = $\sqrt{(36 \times 4 \times 6)/19}$
- Radius = $\sqrt{(36 \times 6)/19}$
- Circumference = $(19/6) \times \sqrt{[(36 \times 4 \times 6)/19]}$

Area of a circle = Area of a Square

Area of a Square = side of a square x side of a square

Quadrature – Squaring the Circle and Ali Pi (Cont..)

Side of a Square = Square root of Area of a Circle	
• So Side of a Square = $\sqrt{36}$	
= 6	A=36
And all the four sides of a square are equal.	
Area of the circle = 36	6
= Area of a Square	Ŭ
 So Area of a Square would be = 36 = 6 × 6 	
	A=36
36 = 36	
Area of a Circle = Area of a Square	
Squaring the Circle – Quadrature	

Illustration of squaring the Circle – Quadrature

Suppose the Area of the circle is **361**

Diameter = $\sqrt{(361 \times 4 \times 6)/19}$

Radius = $\sqrt{(361 \times 6)/19}$

Circumference = $(19/6) \times \sqrt{[(361 \times 4 \times 6)/19]}$

Pi = 19/6 = 3.166666666666.....

Area of a circle = Area of a Square

Area of a Square = $(side of a square)^2$ Side of a Square = $\sqrt{Area of a Circle}$ Side of a Square = $\sqrt{361}$ And all the four sides of a square are equal.

Illustration of squaring the Circle – Quadrature (Cont..) Area of the circle = 361 = Area of a Square

Area of a Square = $\sqrt{\text{Area of Circle x}} \sqrt{\text{Area of a Circle}}$

A = 361

 $\sqrt{\text{Area of a Circle}} = \sqrt{361} = 19$

So Area of a Square would be = 361

Side of a square = $\sqrt{361} = 19$ **361 = 361** Area of a Circle = Area of a Square

Quadrature proved

Squaring of Circle is now an easy problem with Ali Pi.

".....mathematical proofs, like diamonds, are hard and clear, and will be touched with nothing but strict reasoning."

(Nikolai Lobatchevsky)

A = 361
Rectification of a Circle

 Rectification of the circle means constructing an ideal straight line equal in length to the circumference of the circle.

Proof of Rectification of the Circle

- 1. If the diameter of a circle is 6, then circumference of a circle is 19, we can draw a straight line of 19.
- 2. If the diameter of a circle is 36, then circumference of a circle is 114, we can draw a straight line of 114.
- 3. If the diameter of a circle is 114, then circumference is 361, we can draw a straight line of 361.
- 4. If the diameter of a circle is 60, then circumference is 190, we can draw a straight line of 190.

Length = 19

C = 19

Sphering the Cube and Circling the Square With Ali Pi

It is also now possible to make a sphere from the cube and to make a circle with a square now with the 'Perfect Ali Pi'.

In this case, a Sphere whose surface area should be equal to the surface area of a Cube
 The area of a circle would be equal to the area of a

square.

A = 36119 A = 36119
19

6

A = 216

6

A =216 6

6

19



Circling the Square (Cont..)

- Diameter = $\sqrt{[(225 \times 4 \times 6)/19]}$
- Circumference = $(19/6) \times \sqrt{[(225 \times 4 \times 6)/19])}$
- Area of a Circle = Pi x (Radius)²
- Area of a Circle = (19/6) x [(225 x 6)/19]
- Area of a Circle = 19/6 x [(225 x 6)/19] = 225

Area of a Circle = 225 = Area of a Square

Cubing the Perfect Sphere – Another Remarkable Milestone in Mathematics

Suppose the Area of a sphere = 216.

Radius of a sphere = √(1296/76)
 Diameter of a sphere = 2 x √(1296/76)

Pi = 19/6 = 3.1666666...... • Area of a sphere with radius equal to = 4 x pi x (r)² = 216

Area of a sphere = Area of a cube

Where Area of a cube = 6 (a x a)

And a = one side of a cube, which has 6 equal sides.

Cubing the Perfect Sphere – Another Remarkable Milestone in Mathematics (Cont..) 216 = 6 (a x a) (a x a) = 6 x 6 = 36

Take the square root on both sides to get the value of a



So Area of a Cube = 6 (6 x 6) = 216.

216 = 216

Area of a Sphere = Area of a Cube

"The science of mathematics presents the most brilliant example of how pure reason may successfully enlarge its domain without the aid of experience."

Emmanuel Kant

6

A = 216

6

A =216

6

6

Cubing the Sphere with Ali Pi

Suppose the Area of a sphere with = 4 x pi x (r)² = 2166

Radius of the sphere is $-\sqrt{171}$ **Diameter would be** $-2 \times \sqrt{171}$

Area of a sphere = Area of a cube

Where Area of a cube = 6 (a x a)
And a = one side of a cube, which has 6 equal sides.

Cubing the Sphere with Ali Pi (Cont..)

2166 = 6 (a x a) So (a x a) = 361

Take the square root on both sides to get the value of a

• So a = $\sqrt{361}$ = 19

Area of a Cube = $6 \times (19 \times 19)$

So Area of a Cube = 2166 2166 = 2166 Area of a Sphere = Area of a Cube Sphering the Cube with Ali Pi Surface Area of a Cube = 6 (a x a) Suppose a = 1

Pi = 19/6 and 'r' is the radius of a Sphere. Surface Area of a Cube = $6 \times (1 \times 1) = 6$

Surface Area of a Cube = Surface Area of a Sphere

Surface Area of a Sphere = $4 \times Pi \times (r \times r) = 6$ = $4 \times (19/6) \times (1 \times 1)$

 $radius^{2} = 6 \times (6/19) \times (1/4)$

Radius = $\sqrt{[6 \times (6/19) \times (1/4)]}$

Sphering the Cube (Cont..) Radius of a Sphere = $\sqrt{36/76}$

- Diameter of a Sphere = $2 \times \text{Radius of a Sphere}$ = $2 \times \sqrt{[36/76]}$
- **Diameter of a Sphere = 2 \times \sqrt{36/76}**
- Circumference = (19/6) x Diameter of Sphere
 of a Sphere

 $= (19/6) \times 2 \times \sqrt{36/76}$

• Circumference of a Sphere = $(19/6) \times 2\sqrt{36/76}$

Sphering the Cube with Ali Pi (Cont...)

- Surface Area of a Sphere = 4 x Pi x (r x r) = Pi x (d x d)
- Area of Sphere = $(19/6) \times 2 \times \sqrt{36/76} \times 2 \times \sqrt{36/76}$
- Surface Area of a Sphere = 6.
- Surface Area of a Sphere = Surface Area of a Cube

6 = 6

16

 Sphering the Cube is proved with the 'Perfect Ali Pi' with all the rational and real values of 'Radius, Diameter and Circumference of a Sphere'.

PHASE 9

PERFECT ALI-PI

Ali Pi as a Fraction

Ali pi is written and expressed as definite fraction and ratio of two numbers:

Ali pi = 19/6= 3.166666666...Ali pi = 3 + 1/6

 Any rational number which cannot be expressed as a decimal fraction has a unique infinite decimal expansion ending with recurring decimals. For example:

> 1/3 = 0.3333.....(with 3 recurring)1/6 = 0.1666666....(with 6 recurring)1/9 = 0.1111.....(with 1 recurring)

Ali Pi as a Fraction (Cont...)

- There is a very important conclusion in these figures. If we divide 1 by all the numerals from 1 to 10, only three decimals or digits recur and they are 3, 1 and
 6. And these are the numbers of Ali Pi - 3.16.....
- One can well imagine the mystery of these three numbers – 3, 1 and 6 in all the mathematical calculations.

Only 3 Numbers recur when 1 is divided by numbers from 1 to 10 and they are 3, 1 and 6

Ali Pi is Arithmetic

Ali Pi written in different forms of fractions:

Ali Pi = 3 + 1/6
 Ali Pi = 2 + 7/6
 Ali Pi = 1 + 13/6
 Ali Pi = 2 + 21/18
 Ali Pi = 1 + 39/18
 Ali Pi = 2 + 14/12
 Ali Pi = 1 + 26/12

Ali Pi is Arithmetic (Cont..)

8. Ali Pi = 3 + 2/129. Ali Pi = 3 + 3/1810. Ali Pi = $2 + \frac{28}{24}$ 11. Ali Pi = 3 + 30/18012. Ali Pi = 3 + 60/360 13. Ali Pi = 3 + 6/36 = 114/361 = 3.1666666....14. Ali Pi = 3 + 3/1815. Ali Pi = 3 + 15/90

Ali Pi – is Algebraic

Now I have proved that 'Perfect Ali Pi' is a real ratio of two 'Perfect Numbers' of 19 and 6 and Ali Pi then becomes a rational and constant number.

 With the conclusion, it also becomes algebraic i.e. non-transcendental number, which means that it can be the root of any polynomial with rational coefficients.

So 'Perfect Ali Pi' is Algebraic.

Ali Pi is not a Transcendental Number

- Ali Pi is not a transcendental number because there is a polynomial with rational coefficients of which Pi is a root.
- The important consequence of its non-transcendence of Pi is the fact that is constructible because the real numbers are used as a circumference and the diameter; the value of Pi is rational and real.

Is Pi a Rational or Irrational number

 It was proved and concluded in the history of Pi that the Pi is an irrational number, because it could not be written down as the ratio of two integers. This was proved in 1761 by Johann Heinrich Lambert.

But now onwards - Pi is a rational number

- Now as we know that Pi is a ratio of two real integers, i.e. 19 divided by 6, so Pi is a rational number
- Any rational number which cannot be expressed as a decimal fraction has a unique infinite decimal expansion ending with recurring decimals.

Is Pi a Rational or Irrational number (Cont...)

- Decimal fraction is a fraction where the denominator is a power of ten. For example, 9/10, 4/100, 7/1000, etc
- Ali Pi is a rational number
- Ali Pi is a rational number A ratio of two real integers and even if it is not expressed as a decimal fraction, it has a unique infinite decimal expansion ending with only one recurring decimal i.e. Number – 6 – a Perfect Number in mathematics.

Ali Pi = 19/6 = Ratio of two real integers

Finite Rationality of Infinite Sums of Rational Numbers

 Since Pi = 3.166.. is a rational number and a constant ratio of two real numbers, so a rational number plus a rational number is a rational number for any infinite sums and that sum is also a finite number because there are no infinites in the physical universe, whatever bigger or higher the value is with number - 6 appears infinitely with rationality of Ali

pi.

Pi + Pi + Pi +..... = Rational Finite Pi = 19/6

= 3.16666666666

Circles are Constructible with Compass and Straightedge by using 'Perfect Ali Pi'

- One can now construct any 'Circle' with compass and straightedge by using the 'Perfect Ali pi' as 3.1666..... or 19/6. So the unsolved mathematical riddle or problem is solved for ever that Circles can be drawn by using only a finite number of steps with compass and straightedge.
- For instance, if we know that the diameter of a circle is 12, we can draw a circle of radius – 6 and circumference – 38 and Area of a Circle would be – 114.

Diameter of a Circle if known – 12 Then radius of a Circle would be – 6 Circumference of a Circle would be – 38 Area of a Circle would be – 114

Circles are Constructible with Compass and Straightedge by using 'Perfect Ali Pi'

So any circle can be drawn by a compass and straightedge and its 'Perfect Circumference' and 'Perfect Area' can be found out by using the **'Perfect Ali Pi' – 3.166666.... or** 19/6.

C = 38 D = 12 R = 6

Is Pi Simply Normal to the base-10

- It was not sure before that is Pi simply normal to the base 10.
- Now with the proof of Ali pi, it can be easily proved that Pi is simply normal to the base 10 because decimal notation is the writing of numbers in the base 10 numeral system, which uses various symbols called digits for ten distinct values, 0,1,2,....8 and 9 to represent numbers.
- These digits are often used with a decimal separator which indicates the start of a functional part and with one of the sign symbols + or - in front of the numerals to indicate sign.
- And any rational number which cannot be expressed as a decimal fraction has a unique infinite decimal expansion ending with recurring decimals.

Is Pi simply normal to the base-10 (Cont..)

- So pi is a rational number which cannot be expressed as a decimal fraction but has a unique infinite decimal expansion ending with recurring decimal number or digit 6.
- A decimal fraction is a fraction where the denominator is a power of ten. Decimal fractions are commonly expressed without a denominator, the decimal separator being expressed into the numerator with leading zeros added if needed, at the position from the right corresponding to the power of 10 of the denominator, e.g. 9/10, 9/100, 9/1000, 9/10,000 are expressed as 0.9, 0.09, 0.009 and 0.0009. In English speaking countries, a dot or period (.) is used as the decimal separator.

 It is a ratio of two normal numbers, rational and real constant number and the numbers – 19 and 6 are normal to the base 10.

Whether Pi is a normal Number

- The most important and open question up till now about Pi is whether it is a normal number or not?
- Whether any digit block occurs in the expansion of Pi just as often as one would statistically expect if the digits had been produced completely 'randomly' and that this is true in every base, not just base 10. Current knowledge on this point is very weak till now, e.g., it was not known which of the digits 0,...., 9 occur infinitely often in the decimal expansion of Pi.

Ali Pi is a Normal Number

 Pi is a normal, real, perfect, rational, unique and natural number because it is a ratio of two real and rational numbers, 19 divided by 6.

Whether Pi is a normal Number (Cont..)

- Six 6 is the Only Number Infinitely Repeating in Decimal expansion of Pi.

 I proved that Ali pi is a normal number because it a normal ratio of two normal numbers and a rational mathematical number and ratio.

Is Pi a plane solution to a geometry problem?

- The problem of squaring the circle in the form which we think of it today originated in Greek mathematics and it is not always properly understood.
- The problem was, given a circle, to construct geometrically a square equal in area to the given circle.
- The methods allowed to use to do this type of construction varies from the range of methods used in geometry by the Greeks to solve this and other classical problems.

Area = 36 6 Area = 36 6

6

6

Is Pi a plane solution to a geometry problem? (Cont..)

 Pappus, writing in his work, 'Mathematical Collection' at the end of the Greek development of geometry, distinguishes three types of methods used by the ancient Greeks, He wrote:

"There are, we say, three types of problem in geometry, the so-called 'plane', 'solid', and 'linear' problems. Those that can be solved with straight line and circle are properly called 'plane' problems, for the lines by which such problems are solved have their origin in a plane. Those problems that are solved by the use of one or more sections of the cone are called 'solid' problems. For it is necessary in the construction to use surfaces of solid figures, that is to say, cones. There remain the third type, the so-called 'linear' problem. For the construction in these cases curves other than those already mentioned are required, curves having a more varied and forced origin and arising from more irregular surfaces and from complex motions."

Is Pi a plane solution to a geometry problem? (Cont...)

- Now we think of the problem of squaring the circle to be a problem which has to be solved using a ruler and compass. That is squaring the circle is a 'plane' problem in the terminology of Pappus.
- As I have already shown the squaring of a circle or the quadrature of the circle. So squaring the circle is a 'plane' problem and Ali pi is simply a plane solution to a geometry problem.
- So it is now proved that Ali pi is simply a plane solution to a geometry problem because Ali pi is a simple ratio of two real numbers in a Perfect Sphere or a Perfect Circle and with these perfect numbers, Perfect Circle can be squared also and can be used as a mathematical constant number in the scientific, mathematical and geometry problems wherever needed.

Ali pi is a plane solution to a geometry problem.

Is it possible to represent Pi as an exact expression in surds like square root, cube root or a fraction of two definite and real numbers?

It is possible now to represent Ali pi as an exact expression in surds like square root, cube root or fraction of two definite and real numbers.

A. Ali pi = 19/6 or 3.16666.... expressed as a Fraction of two real numbers of 19 and 6 or fraction of three numbers 3.

B. Square root of Ali pi = $\sqrt{(19/6)}$

C. Cube root of Ali pi = $\sqrt{(19/6)}$

Exact Value of a Radian

 An angle formed by the intersection of two radii at the center of a circle, when the length of the arc cut off by the radii is equal to one radius in length. Thus the radian is a unit of angle equal to 56.84210526 degrees and there are 2 x Pi radians in 360 degrees.

> 2 x Pi x 56.84210526 = 360 degrees 2 x 19/6 x 56.84210526 = 360° Also 56.84210526 = 57(approximately) = Half of the Perfect Sphere = Hemisphere

The value of the radian accepted before was 57.29577951. So the difference between the actual value of radian, which is 56.84210526 and the value accepted before is
 Difference in the value of radian = (57.29577951) – (56.84210526)

= 0.453674253

Value of Radian and Pi

- Pi = 19/6if taken
- 360 = 2 x pi x radian
- 180 = pi x radian
- Radian = 360/ 2 x 1/pi
- Radian = 56.84210526.....
- Pi = 360/2 x 1/radian
- Pi = 180 x 1/radian

Do any of the digits 0, 1,...9 occur infinitely in Pi

It was not sure before which of the digits 0, 1,....,9 occur infinitely in Pi.

 I proved and discovered that the digit – 6 appears and occurs infinitely in Ali pi, which is the First and Smallest Perfect Number.

6 is the infinite digit in the Rational value of Ali pi.

Why 6 is repeating in Ali Pi?

Mathematical rational value of

The Number – 6 is repeating infinitely in Ali Pi because:

6 is the First and the smallest Perfect Number in Mathematics.
Whether Pi and e (Euler's Constant) are algebraically Independent or Not



It was also unknown whether Pi and e (Euler's constant) are algebraically independent or not. However it was known that at least one of Pi x e and Pi + e is transcendental. For details, one can see Lindemann – Weierstrass theorem.

Pi is an Independent and Real Number

- Now with the proof that Pi is a rational, real, natural, constant, unique, logical and mathematically proved constant
- So based on the above facts regarding Pi, both Pi and e (Euler's constant) must be algebraically independent.
- The relationship between Pi and the e (Euler's constant) is shown by 'the most remarkable formula in mathematics' called by Richard Feynman.

 $e^{i\pi} + 1 = 0$

- e = Euler's constant
- pi = circumference divided by the diameter of a circle.
- i = imaginary constant
- It is known as 'Euler's identity'
- Where e = 2.718281828....= (Pi)²/6 --- as accepted now

How can we prove that Pi as a constant actually exists

It was not sure before that how can we prove that Pi as a constant actually exist or not? Because its ratio could not be defined as a rational number or it is not considered as the ratio of two real integers. Pi was considered as a transcendental number.

Now with the proof that Ali pi is a rational mathematical constant number because it is a ratio of two real numbers of the circumference and the diameter of a Perfect Sphere or a Perfect Circle. So Ali pi is constant in all the circles and spheres and it can be proved that Ali pi exists as a constant in all circles and spheres in our universe.

Physical Universe is Finite Infinity and Not Infinite Infinity

- There are no infinite infinites in the finite infinite Physical expanding Universe.
- Every true distance in the physical universe is a finite number with a finite number of digits, and as the circumference and the diameter of a circle are in reality the distances in the physical universe.
- So if pi = c/d, as the product of any finite number multiplied by any other finite number CANNOT equal infinity.
- As true infinite infinities are impossible in the physical universe, pi's irrational digits cannot go on forever.

Definition of our Expanding Spherical Universe

I define the Expanding Spherical Universe as:

 Our Expanding Spherical Universe is a very Big Expanding Sphere of matter, life, time and space whose circumference is expanding in the multiple of 19 and diameter is expanding is expanding in the multiple of 6 and our Universe is actually expanding in and towards another Very Big Sphere of space, whose dimensions are only known to One and Only Almighty God.

"With power did We construct heaven. Verily, We are expanding it." Quran – (Chapter - 51, Verse – 47)

Conclusions about Ali-pi

- **1.** Pi is a normal number.
- 2. pi is a rational number and shows a regular pattern of decimal expansion of 6.
- 3. Pi is a unique number
- 4. Pi is normal to base 10
- Pi has a unique infinite decimal expansion ending with recurring decimal number - 6.
- 6. Circle can be squared- solving the mystery and dreams of all mathematicians.
- **7.** Sphere can be cubed.

- 8. Rectification of the circle is possible i.e. we can construct an ideal straight line equal to circumference of a circle.
- 9. Perfect sphere exists in nature and mathematics.
- **10.** Perfect circle exists in mathematics.
- 11. Pi is not a transcendental number.
- **12.** Pi is a natural number
- **13.** Pi is a mathematical constant number
- **14.** Pi is a spiritual number

- 15. Pi is a universal number
- **16.** Pi is a mysterious number
- 17. Pi is a definite number
- 18. Pi is a real number
- **19.** Pi is a symmetrical number
- **20.** Pi is a logical number
- **21.** Pi is a soluble number

22. Pi is a consistent number

23. Pi is a flawless number

24. Pi is a complete number

25. Pi is a perfect number

26. It is possible to represent pi as an exact expression in surds like square, cube, square root, cube root or a fraction of two real and definite numbers.

27. Pi is a physical number.

- 28. Pi is an independent number.
- 29. Pi is a plane solution to a geometry problem.
- **30.** Pi is a solution to the world's most problems and calculations.
- 31. Pi is a god' riddle solved today.

Thanks to One and Only Almighty God who has guided us in the right direction where all mankind were trying to reach the "perfection" of His most important mathematical and universal riddle till today.

Ali Pi = 19/6 = 3.16666 ... Infinite 6....

Summary of All - 66 Mathematical Claims, Proofs and Conclusions

- 1. Perfect Sphere do exist in our Spherical Expanding Universe, life, time and space.
- 2. Perfect Circle do exist in our Mathematics and Science.
- **3. 19** is the Perfect Constant Circumference of a Perfect Sphere or a Perfect Circle.
- **4. 6** is the Perfect Constant Diameter of a Perfect Sphere or a Perfect Circle
- **5. 3** is the Perfect Constant Radius of a Perfect Sphere or a Perfect Circle.
- 6. 114 is the Perfect Constant Surface Area or the Perfect Constant Volume of a Perfect Sphere.
- 7. 57 is the Perfect Hemisphere and half the Perfect Constant Surface Area and half the Perfect Constant Volume of a Perfect Sphere.
- 8. Perfect Ali Pi is the Perfect Constant Ratio of the Circumference of 19 to the Diameter of 6 of a Perfect Sphere or a Perfect Circle and is equal to:

Summary of All - 66 Mathematical Claims, Proofs and Conclusions (Cont..)

9. Ali Pi is a rational number. **10.** Ali pi is an algebraic number. **11.** Ali pi is a unique number. **12.** Ali pi is a universal number. 13.6 is the number which recurs infinitely in Ali pi. 14. Ali pi is normal to base 10. **15.** Ali pi is a spiritual number. 16. Ali pi is an exact number. **17.** Ali pi is a consistent number. **18.** Ali pi is a constant number. **19.** 360 is the Perfect Constant Degrees of a Perfect Sphere or a Perfect Circle. 20. Quadrature – Squaring the circle is possible with Ali pi.

Summary of All - 66 Mathematical Claims, Proofs and Conclusions (Cont..)

21. Rectification of a Circle is possible with Ali pi.

22. Cubing the Sphere is possible with Ali pi.
23. Circling the Square is possible with Ali pi.
24. Sphering the Cube is possible with Ali pi.
25. Ali pi is a perfect number.
26. Ali pi is an independent number.
27. Ali pi is a natural number.
28. Ali pi is a flawless number.
29. Ali pi is a complete number.
30. Ali pi is a symmetrical number.
31. Ali pi is a rhythmic number.

Summary of All - 66 Mathematical Claims, Proofs and Conclusions (Cont..)

- 32. Ali pi is a real number.
- **33.** Ali pi is a dynamic number.
- 34. Ali pi is a logical number.
- **35.** Ali pi is a definite number.
- 36. Our Universe is a Perfect Expanding Sphere whose circumference is a multiple of 19 and diameter is a multiple of 6.
- **37.** Our Perfect Sphere of Universe is expanding in a Very Big Sphere of Space whose circumference is also a multiple of 19 and diameter is a multiple of 6.
- 38. Number 6 is the Perfect constant Universal and Mathematical Number.

39. Number – 1 is the Perfect Divine Unity Number of One and Only Almighty God and a mathematical Universal Perfect Number.

40. Number – 7 is the Perfect Eternal Number because it is a sum of two perfect Numbers of 1 and 6.

 41. Number – 13 is the Perfect Mysterious Number because it is a sum of two Numbers – 6 and 7 where 6 is the Perfect Universal Number and 7 is the Perfect Eternity Number.

Summary of All - 66 Mathematical Claims, Proofs and Conclusions (Cont..)

- 42. Number –19 is the Perfect Constant Highest Number in Universe and in Mathematics.
- 43. Number 66 is the Perfect Constant Wheel or Rotating Number of our Universe, life, time and space.
- 44. 216 is the Perfect Constant Surface Area and Perfect Constant Volume of a Perfect Cube with all sides equal to Six – 6.
- 45. Number 361 is a Super Universal Cycle.
- 46. Number 360 is a Super Universal Rotation of 6 x 6 x 10.
- 47. The root number of Ali pi 3.16..... is Number 1.
- 48. 360 x 361 is the main formula for producing new cycles or circles of 360 without changing the parent cycle.
- 49. 619 is the 114th Prime number.

50. 19 x 6 = 114 is the Divine Scripture Number of all Divine Holy Books including Torah, Bible and Quran.

51. 19/6 is the Perfect Ratio in Mathematics. 52. Ali Pi expressed in Number – 10 as:

Ali Pi = $\sqrt{10 + 10^\circ}$ degrees = 3.16666666.....

Summary of All - 66 Mathematical Claims, Proofs and Conclusions (Cont..)

53. The Perfect Pair in Mathematics is 6 and 19.

54. Number – 1 is the Perfect Number to represent the Perfect Infinite Divine Unity of One and Only Almighty God.

55. The Perfect Prime Number in mathematics is Number – 19 and Number – 19 is the 8th Prime Number and the root number of 19 is 1.

56. The Perfect Even Number in mathematics is Number – 6 and Number – 6 is the 4th Even Number as 0, 2, 4, 6.....

57. The Perfect Odd Number in mathematics is Number – 19 and Number – 19 is the 10th Odd Number as 1, 3, 5, 7, 9, 11, 13, 15, 17, 19,.....

 58. The Perfect Multiplication in mathematics is the multiplication of the two perfect numbers – 19 and 6 as 19 x 6 = 114. So Number – 114 is the Perfect resulting number of the Perfect Multiplication in mathematics.

Summary of All - 66 Mathematical Claims, Proofs and Conclusions (Cont..)

59. The Perfect Subtraction in mathematics is the subtraction of the two perfect numbers --- 19 - 6 = 13. So Number - 13 is the Perfect resulting number of the Perfect Subtraction in mathematics.

60. The Perfect Addition in mathematics is the addition of the two perfect numbers 19 + 6 = 25. So Number - 25 = 5 x 5 or 25 = 2 + 5 = 7 is the Perfect resulting number of the Perfect Addition in mathematics.

61. The Perfect Division in mathematics is the division of the two perfect numbers......19/6 = 3.1666666..... So 19/6 is the Perfect resulting number of the Perfect Division in mathematics.

62. Number – 19 when written upside down become Number – 16 which is also present in Ali Pi after Number – 3 as Ali Pi = 3.16...... And the root number of Number – 3.16...... is Number – 19 as... 3 + 16 = 19. Also Number – 16 when written upside down becomes Number – 19. The numeric sum of Number – 19 is Number – 1 as 1 + 9 = 10 = 1 + 0 = 1.

63. The Number – 19 is the 'Smallest Perfect Prime Number' with a digital root of Number One – 1.

Summary of All - 66 Mathematical Claims, Proofs and Conclusions (Cont..)

64.There are 57 Even Numbers below Number – 114. The Number – 114 also represents the 'Perfect Surface Area and Perfect Volume' of a 'Perfect Sphere' and the Number – 57 represents the 'Perfect Surface Area and Perfect Volume; of a 'Perfect Hemisphere'. There are 28 Odd numbers below Number – 57 and Number – 28 is the 2nd Perfect Number in mathematics.

65. The Number – 66, the numeric sum of the Arabic name of 'Allah' when written upside down becomes Number – 66, which are the total Arabic names of 'Allah' the One and Only Almighty God in the Holy Book of Quran and the 99 names of Allah in The Quran have a total of 396 Arabic letters and the Number – 396 is a multiple of both the Numbers – 66 and 99 as:

396 Arabic letters of names of Allah = 6×66 **396** = 4×99

66. Perfect Ali Pi is a 'Perfect Ratio' of 'smallest perfect prime number – 19 with a digital root of 1 and ' perfect even number – 6'.

Perfect Ali Pi = Smallest Perfect Prime Number/ Smallest Perfect Even Number = 19/6

Ali π and Greek π

Ali π

1. Rational 2. Perfect 3. Real 4. Definite 5. Natural 6. Algebraic & Arithmetic Transcendental 7. Exact 8. Unique 9. Independent **10. Logical 11. Symmetrical 12.** Consistent

Irrational Imperfect Unreal Indefinite **Synthetic** Approximate Unnatural Dependent Illogical Unsymmetrical Inconsistent

T - Different Names in History

 Ludophian Number
 Archimedes Constant
 Greek Pi - T
 From Now onwards it would be known as - Ali Pi - T

A Novel – 'The Pi Conspiracy'



Ali Pi Day – March – 16 or 3.16

March $16^{th} = 3.16$ -- Matches with the value of Ali pi - 3.16.....

Ali Pi Day may be celebrated on March 16th

Ali Pi Day – March 16th

Every Year in the World



Ali $\pi = 3.1666666...$

Authentication of Ali Pi by Famous Euler's Equation of Leonhard Euler (1773 CE), famous Swiss mathematician developed a famous equation for πas:

 $\mathcal{T} = \lim(n \to \infty) [(1/n) + (1/6n^2) + 4n\{(1/n^2+1) + (1/n^2+2^2) + + (1/n^2+n^2)\}]$

For $\Pi = 1$, the value of Pi is:

Reference: This famous equation is discovered in a correspondence to Christian Goldbach, Castellanos, 'The Ubiquitous, " – Page – 73

Authentication of Ali T by a famous mathematician- John Davis

" I have found by the operation of figures, that this proportion is as 6 to 19. Now, in order to make a ratio, I divide the 19 by 6, which gives 3.1666666.....I am asked what evidence I have to prove that the proportion the diameter of a circle has to its circumference is as 6 to 19? I answer, there is no other way to prove that an apple is sour, and why it is so, than by common consent."

John Davis, The Measure of the Circle, 1854

Reference: The Joy of Pi by David Blatner - Pg:100

Authentication of Ali T by a famous mathematician- John Davis

" I find the value of 3.16666....by multiplying by 3, which bring it into whole numbers, 9½. This is a ratio will answer for whole numbers in all cases, because it finds the substance of both dividend and divisor. My proportion of the diameter to the circumference is perfect, and that being perfect, makes my ratio perfect. But any ratio to be derived from 7 to 22 would be imperfect, in as much as the proportion is imperfect."

John Davis, The Measure of the Circle, 1854

Practical Application of 3.166..... by a Mechanic of New Jersey

" I have wrought as a mechanic for twenty years, and in some of my mechanical operations I have found it very difficult to match my work from the proportion of as 7 to 22, and by experimental operations, I came to the measure of 3 times the diameter, and 1/6, and from this I have found no difficulty in matching my work; and when Mr. Davis told me that 3 and 1/6 times the diameter was his proportion, I was satisfied that his measure was correct."

A Mechanic of Paterson, N.J.

Reference: Testimonials in Measure of the Circle - by John Davis Page - 155

Comment of Sabin Smith on John Davis calculation of 3.166.....

"I have travelled with Mr. John Davis, in England and the United States, for six years; we have visited all the most learned mathematicians that we could hear of, but have never found one that attempted a disapproval of his work. I have examined, to the best of my ability, the works of writers on mathematics since the time of Euclid; and without a doubt, according to mathematics, he has solved the wonderful problem, surprising as it may appear to many.

Weights and measures can now be made perfect, and to the satisfaction of every man, woman, and child. Space and distance, which have never been known, and now found by John Davis."

Sabin Smith

Reference: Testimonials - The Measure of the Circle - John Davis

3.16666....tested by Professionals

"I have examined the measure of the circle by John Davis, and beyond all doubt it is perfect measure."

Henry R. Savory, Civil and Military Engineer

"I have examined the measure of the circle by Mr. John Davis, and find it, in my opinion, a most complete, scientific, mathematical measure of the circle."

Thomas Guille, Professor of Mathematics

Reference: Testimonials – The Measure of the Circle, John Davis

Discovery of Ali Pi from outside

"Amazingly, lack of formal education can be an advantage. We get stuck in our old ways. Sometimes, progress is made when someone from the outside looks at mathematics with new eyes."

Doris Schattschneider, Los Angeles Times

Perfect Ali Pi ---- 19/6 = 3.1666...

"My theory stands as firm as a rock; every arrow directed against it will return quickly to its archer. How do I know this? Because I have studied it from all sides for many years; because I have examined all objections which have never made against the infinite numbers; and above all because I have followed its roots, so to speak to the first infallible cause of all created things."

George Cantor

Special Word of Thanks

I thank my One and Only Almighty God for his Divine help in my research and final discovery of Ali Pi and my parents and all my family, friends and people who helped me achieving this big goal of completion of my work. God bless them for their contributions.

Syed Abul Hassan