Phase 2

In Search of Perfect Circle

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

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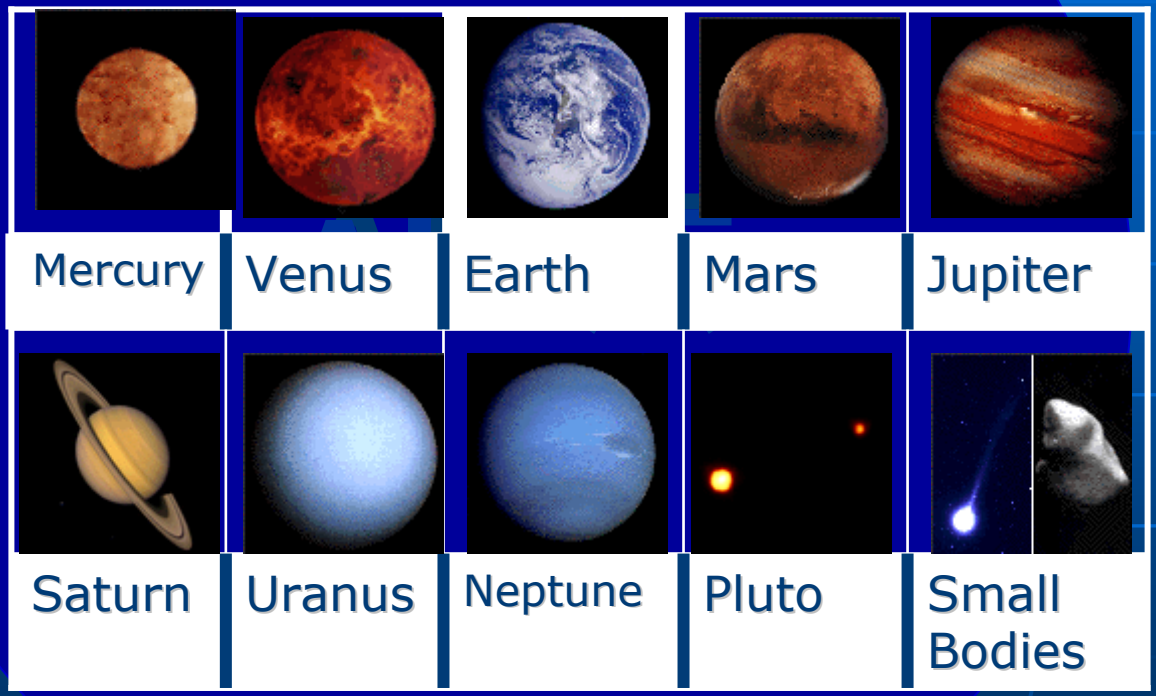
Perfect Spherical Expanding Universe

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

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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."

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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:

1. Wheel of Fortune.
2. Bicycle wheel.
3. Color wheel.
4. Steering wheel.
5. Ship's wheel.
6. Artillery wheel.
7. Tire
8. Wire wheels.
9. Breaking wheel.
10. Driving wheel.
11. The Bible Wheel
12. Circular wheel.

A driving wheel on a steam locomotive

Ali

Spherical Eye

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

Human 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 Eye’.

Spherical Human Eye

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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

= O / 1

Zero and One is the One and the Only language of Computers.

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π by Super Brain or
π by Super Computer

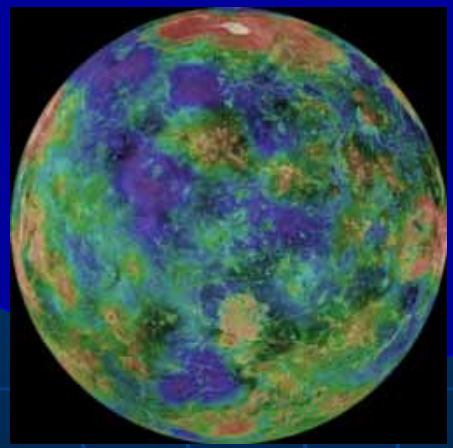
"The matter of the normalcy or non-normalcy of pi will never, of course, be resolved by electronic computers. We have here an example of a theoretical problem which requires profound mathematical talent and cannot be solved by computations alone. The existence of such problems ought to furnish at least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

What 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

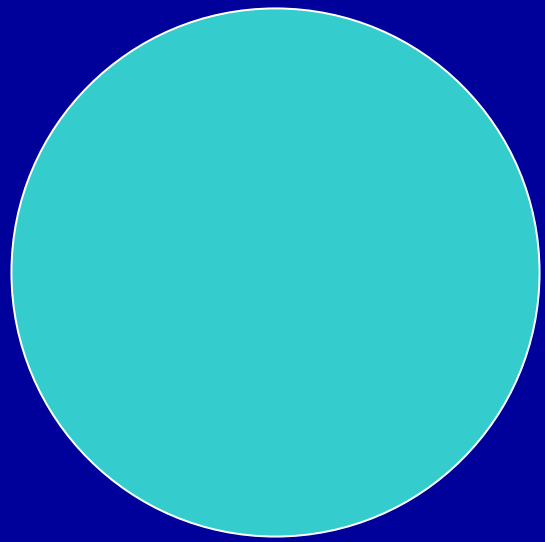
- **Perfection: In broader sense, it is a state of completeness and flawlessness. The word, 'perfection' derives from the Latin 'perfection', and 'perfect' from 'perfectus'. These expressions come from the 'perficio' meaning to 'to finish', or 'to bring to an end'.**

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

Perfect and Perfection is defined and described as:

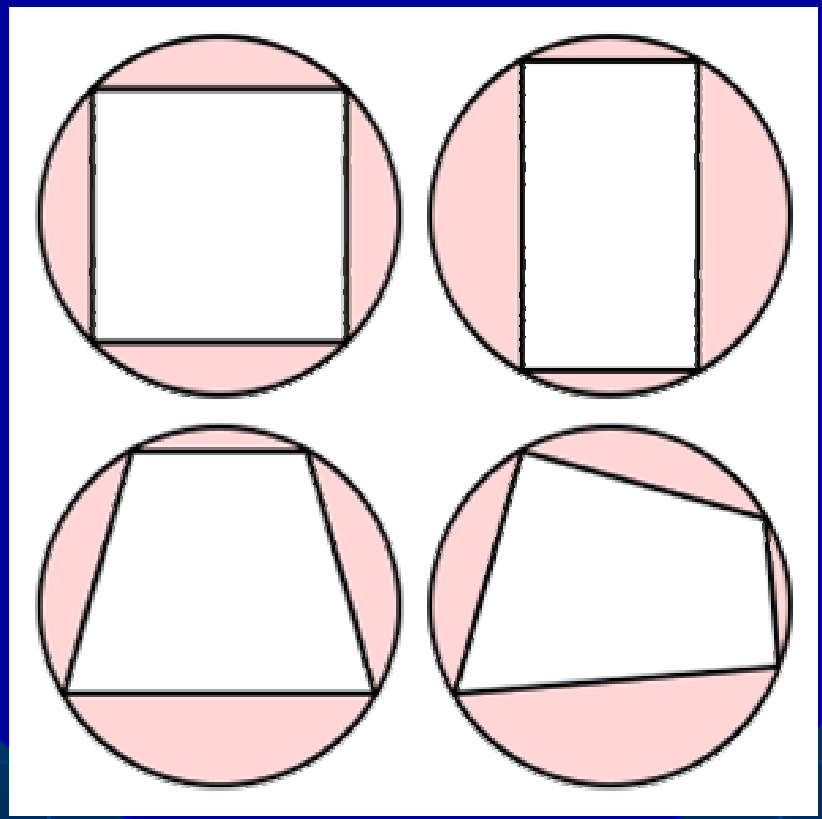
1. ***Which is complete and contains all the requisite parts.***
2. ***Which is so good that nothing of its kind could be better.***
3. ***Which has attained its purpose.***

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.

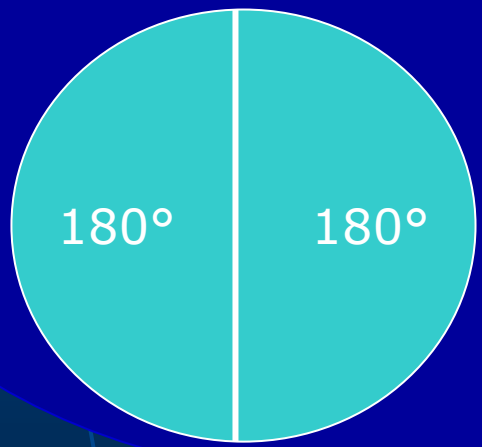
- Perfect Circle **does exist** in Universe and Mathematics. In circle every line through the center forms a line of reflection symmetry and it has rotational symmetry around the centre for every angle. Its symmetry group is the orthogonal group O (2, R). The group of rotation alone is the circle group 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

180° = (19 – 1)° x (1 + 9)° = 180°

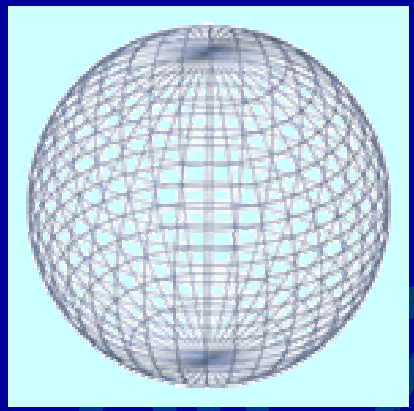


Cycles and Super Cycles
0° = 360°

- 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.

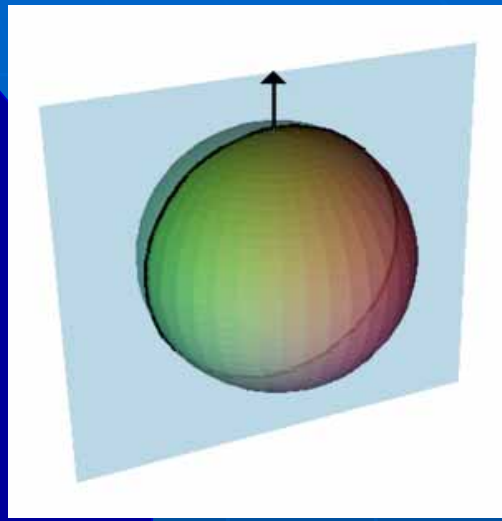
Perfect Sphere



- 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**.*

5. *The sphere **does not have a surface of centers**.* For the sphere the center of every oscillating circle is at the center of the sphere and the focal surface forms a single point. This is a unique property of a sphere.

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'***)

Do Perfect Circles and Perfect Spheres Exist?

- **Mathematicians say:**

  "Perfect Circle and Perfect Sphere do not exist'.

- **I say:**

  Perfect Circle and Perfect Sphere do 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

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Perfect Diameter and Perfect Circumference

- Perfect Diameter and Perfect Circumference of a Perfect Circle or a Perfect Sphere are ***expressed and represented in Numbers***.

- 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 ----------?**

- **Perfect Number for Perfect Circumference 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 x 2 x 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