

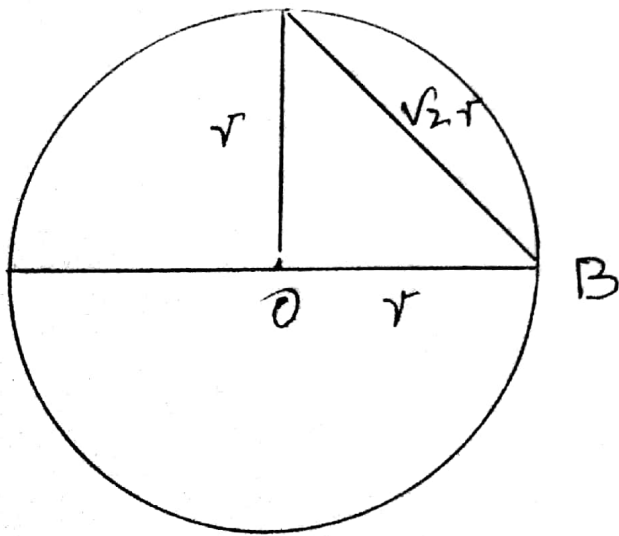
Shiva Shiva
 MATHEMATICAL CIRCUMFERENCES
 (EQUATORIAL) OF EARTH & MOON
 (424th Proof on Rho)

The Data of Wikipedia (By courtesy)

1. Equatorial Radius of Earth = 6378.1 km
2. Equatorial Circumference of Earth = 40,075.017 km

$$\frac{\text{Circumference}}{2 \times \text{Radius}} = 3.14161090293 = \pi$$

New Theorem to find
Circumference of Circle:



" Four times of one eighth of perimeter of inner triangle subtracted - diameter is equal to the Circumference "

New Formula:

$$\left\{ \text{Diameter} - \frac{\text{Perimeter of triangle}}{8} \right\} 4$$

$$= \left\{ 2r - \left(\frac{r + r + \sqrt{2}r}{8} \right) \right\} 4 = 2\pi r$$

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Part I : Earth

Equatorial Radius = 6378.1 Km

Formula (Geometrical based) for Circumference

$$\left\{ 2r - \left(\frac{r + r + \sqrt{2}r}{8} \right) \right\} 4$$

$$\left\{ (2 \times 6378.1) - \left(\frac{6378.1 + 6378.1 + (\sqrt{2} \times 6378.1)}{8} \right) \right\} 4$$

$$= 40136.7022392 \text{ Km}$$

Part II : Moon

Equatorial Radius = 1738.1 Km

Circumference = 10921.0 Km

$$\frac{\text{Circumference}}{2 \times \text{Radius}} = \frac{10921}{2 \times 1738.1} = 3.14164892698 = \pi$$

Circumference as per the
New Formula

$$\left\{ (2 \times 1738.1) - \left(\frac{1738.1 + 1738.1 + (\sqrt{2} \times 1738.1)}{8} \right) \right\} 4$$
$$= 10937.6777036 \text{ Km}$$

Part III : Percentage of Difference (error)

$$\text{Earth Circumference (Standard Value)} = 40,075.017 \text{ km}$$

$$\text{Mathematical Circumference} = 40136.7022392 \text{ km}$$

$$\text{Difference} = 61.6852392 \text{ km}$$

$$\text{Percentage} = 100 \times \frac{61.6852392}{40136.7022392}$$

$$= 0.1536876113 \%$$

$$\text{Moon Circumference (Standard - Wikipedia value)} = 10921.0 \text{ km}$$

$$\text{Mathematical Circumference} = 10937.6777036 \text{ km}$$

$$\text{Difference} = 16.6777036 \text{ km}$$

$$\text{Percentage} = 100 \times \frac{16.6777036}{10937.6777036}$$

$$= 0.15247938412 \%$$

Error/difference is very insignificant.
 God made Earth and Moon as perfect
 as circles on paper. NO WORDS to speak
 Thank God HIS greatness.

Sarva Jagannatha Reddy

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