# BAUDHAYAN (800 BC) - PYTHAGORAS (500 BC) 

## REDDY $\pi$ THEOREM <br> IN FINDING 100\% CORRECT DIAGONAL OF SQUARE <br> (1736 ${ }^{\text {th }}$ Proof)

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The $\pi$ constant and the Pythagorean theorem are the two fundamental geometrical principles. For the $1^{\text {st }}$ time $\pi$ constant is associated with the Pythagorean theorem.

Either $22 / 7$ of Archimedes or 3.14159265358 of the world are only the approximate values of $\pi$. People never thought that $\pi$ can be clubbed with Pythagorean an theorem.

As the circle can be inscribed in a square this theorem can be applied to the diagonal of square only.
The Reddy $\pi$ equal to $1 / 4(14-\sqrt{2})$ can find the $100 \%$ exact / correct value, in total agreement, with the Pythagorean theorem.


Let side of the square and diameter of the circle is 785674201.241 Diagonal of Square applying Pythagorean theorem is $785,674,201.241 \times \sqrt{2}=$
$1,111,111,110.99=1,111,111,111.0$ (One Billion)
Part - II

How the inscribed circle with its circumference finds one Billion exactly?
Reddy $\pi: 1 / 4(14-\sqrt{2})$
Circumference $=\pi \mathrm{d}$
$\frac{14-\sqrt{2}}{4} \times 785,674,201.241$
Multiply circumference 4 times
$4 \times \frac{14-\sqrt{2}}{4} \times 785,674,201.241$
Take 14 times of side (diameter)
$14 \times 785,674,201.241$
Here is the new theorem called Baudhayan - Pythagorean - Reddy $\pi$ theorem
"Four times of circumference of circle subtracted from fourteen times of side (diameter) is equal to the diagonal of square"
$(14 \times 785,674,201.241)-\left(4 \times \frac{14-\sqrt{2}}{4} \times 785,674,201.241\right)$

$$
\begin{gathered}
10,999,438,817.3-9,888,327,706.4= \\
=1,111,111,110.9 \\
=1,111,111,111 \text { (1 Billion) }
\end{gathered}
$$

Proved.
Pythagorean theorem and $\pi$ constant are the two fundamental geometrical principles and they can be independent and or interdependent.

