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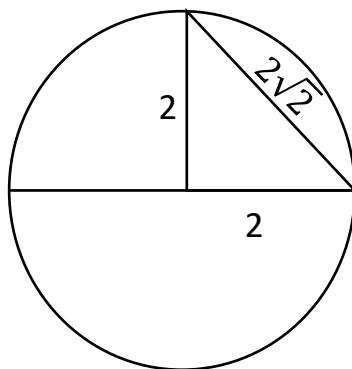
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INTERNATIONAL JOURNAL OF ENGINEERING SCIENCES & RESEARCH TECHNOLOGY
THE DERIVATION OF THE INDIAN π
R. Sarva Jagannadha Reddy

Let us draw a circle and its chord and find out circumference.

Let diameter=4

Radius =2

Chord= $2\sqrt{2}$

Half Chord= $\sqrt{2}$

"Half Chord subtracted seven radii" is equal to Circumference.

7 Radii−Half Chord= $(7 \times 2) − \sqrt{2} = 14 − \sqrt{2}$

When diameter is 4 its Circumference is equal to $14 − \sqrt{2}$. π is the circumference of unit diameter. So, $\frac{1}{4}$ of this Circumference is $\frac{14−\sqrt{2}}{4}$ and is π. The Indian π is real π , **exact** π and an **algebraic** number and is derived based on the dimensions of circle only.