

Circles

Circumference of the circle

Circumference of the circle or perimeter of the circle is the measurement of the boundary of the circle.

The **Circumference (or) perimeter of circle** = $2\pi R$

where,

R is the radius of the circle

π is the mathematical constant with an approximate (up to two decimal points) value of 3.14 or $22/7$

Let us understand with an example:

Example: If the radius of the circle is 5 cm then find its circumference.

Given: Radius = 5cm

Circumference = $2\pi r$

= $2 \times 3.14 \times 5$

= 31.4 cm

Area of Circle

Area of any circle is the region enclosed by the circle itself or the space covered by the circle. The formula to find the area of the circle is;

A = πr^2

Where r is the radius of the circle.

Let us understand with an Example:

Example: If the length of the radius of a circle is 4 units. Calculate its area.

Solution:

Radius(r) = 4 units (given)

Using the formula for the circle's area,

Area of a Circle = πr^2

Put the values,

$$A = \pi 4^2$$

$$A = \pi \times 16$$

$$A = 16\pi \approx 50.27$$