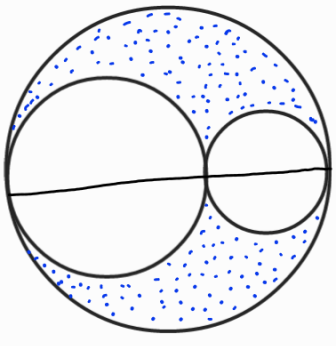
Circumference and Area of Circle : CPP-2

1. Define π (Pie).
2. Find the area of a circle whose diameter is 7 km.
3. Find the radius of a circle if its area is $55.44\ m^2$.
4. A horse is tied to a pole with 28 m long string. Find the area where the horse can graze. (Take $\pi = \frac{22}{7}$).
5. A steel wire when bent in the form of a square encloses an area of $121\ cm^2$. If the same wire is bent in the form of a circle, find the area of the circle.
6. A road which is 7 m wide surrounds a circular park whose circumference is 352 m. Find the area of the road.
7. The radius of one circular field is 20m and that of another is 48 m. Find the radius of the third circular field whose area is equal to the sum of the areas of two fields.
8. Two circles are drawn inside a big circle with diameters $\frac{2}{3}$rd and $\frac{1}{3}$rd of the diameter of the big circle as shown in the figure. Find the area of the shaded portion, if the length of the diameter of the big circle is 18 cm.



9. The radius of a circle is 14 cm. Find the radius of a circle whose area is double of the area of the given circle.

10. The perimeter of a circle is $4\pi r$ cm. What would be the area of this circle?

Brain Teasers

1. The area of a circle is 100 time the area of another circle. What is the ratio of there circumferences?

2. Prove that the area of a circular path of uniform width h surrounding a circular region of radius r is $\pi h(2r+h)$.

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