

Class-5

Subject- Mathematics,

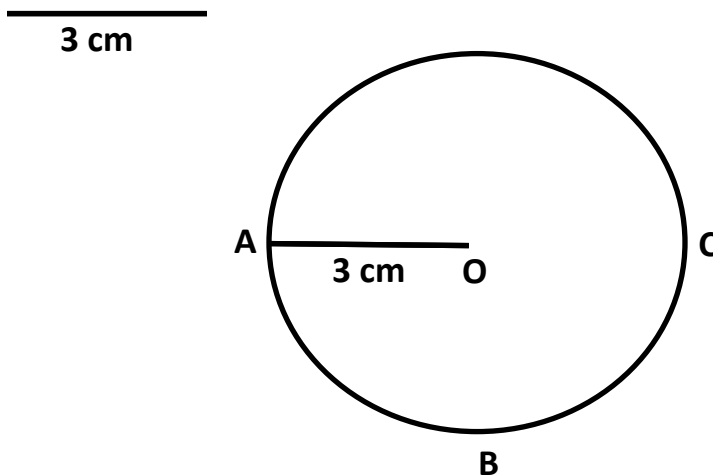
Chapter- Geometry

Circle

Lecture-2

Q 1: Draw a circle of radius 3 cm. Write characteristics of circle.

Solution:



Here, ABC is the circle. OA is the radius and $OA = 3 \text{ cm}$.

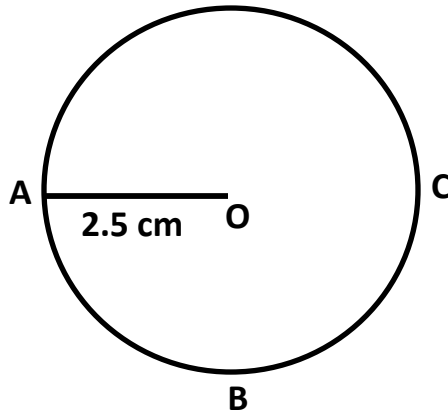
Characteristics:

1. It is a completely round figure.
2. Each and every point on a circle is equidistance from its centre.
3. Its diameter is 2 times of its radius.

Q 2: Draw a circle of radius 2.5 cm. Write characteristics of circle.

Solution:

2.5 cm



Here, ABC is the circle. OA is the radius and $OA = 2.5$ cm.

Characteristics:

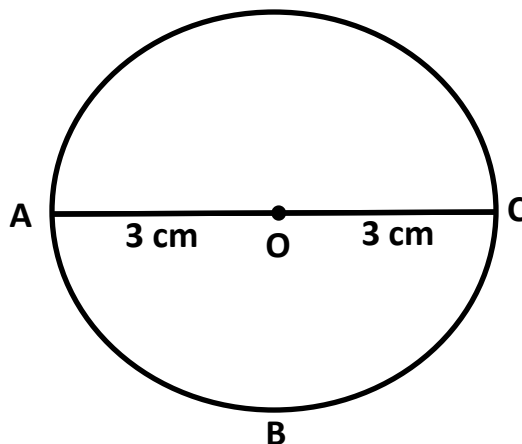
1. It is a completely round figure.
2. Each and every point on a circle is equidistance from its centre.
3. Its diameter is 2 times of its radius.

Q 3: Define circle and Draw a circle whose diameter is 6 cm.

Solution:

Circle: A circle is a closed curved line in which all the points on the curve are in the same distance from the centre.

6 cm



Here, ABC is the circle. AC is the diameter and AC = 6 cm. OA is the radius and OA = 3 cm.

Short question answer:

1. What is called the chord that passes through the centre of a circle?

Ans: Diameter.

2. How many times is diameter of radius?

Ans: Two times.

3. What is the largest chord of a circle?

Ans: Diameter.

4. If diameter of a circle is 4 cm, what is the radius?

Ans: 2 cm

Rough

$$\text{Radius} = \frac{1}{2} \times \text{Diameter}$$

$$= \left(\frac{1}{2} \times 4\right) \text{ cm}$$

$$= 2 \text{ cm}$$

5. If AB and AD are two radius of a circle then how are they?

Ans: Equal.

6. The radius of a circle is 2.5 cm. What is the diameter?

Ans: 5 cm.

Rough

$$\begin{aligned}\text{Diameter} &= 2 \times \text{Radius} \\ &= (2 \times 2.5) \text{ cm} \\ &= 5 \text{ cm}\end{aligned}$$

7. The radius of a circle is 3 cm. What is the diameter?

Ans: 6 cm.

8. What is the relationship between radius and diameter of a circle?

Ans: Diameter = $2 \times$ Radius

OR

$$\text{Radius} = \frac{1}{2} \times \text{Diameter}$$

9. Arc is the part of what?

Ans: Circumference.

10. What is circumference?

Ans: A curved line that bound a circle is called circumference.

Exercise (Do yourself)

1. Draw a circle of radius 3.5 cm. Write characteristics of circle.
2. Draw a circle whose diameter is 7 cm.
3. Define: circle, circumference, arc, radius, chord, diameter.

