

Tender Heart High School, Sec-33B, Chandigarh

Class - IV

Teacher - Ms. Sushma

Subject - Mathematics

Date - 07.10.24

Chapter - 7 Geometry

Circle →

A circle is a simple closed shape bound by a curved line.

Every point on a circle is at an equal distance from a fixed point. The fixed point is called the centre of the circle.

The distance between the centre to any point on the circle is called the radius of the circle.

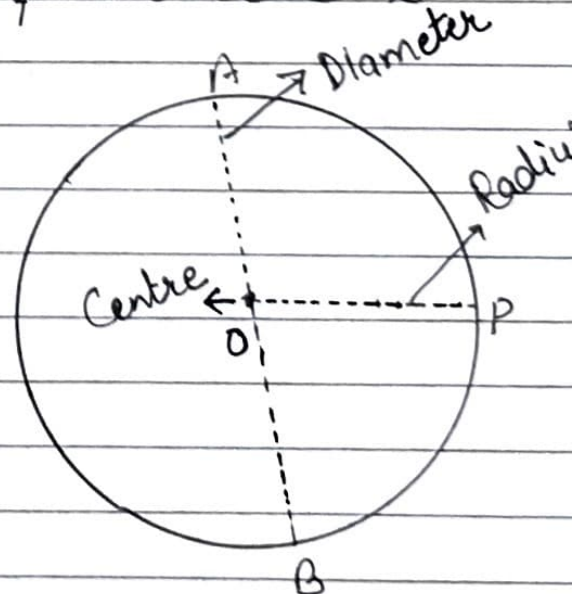
A line segment whose end points lie on the circle and passes through the centre is called the diameter of the circle.

A diameter divides the circle into two equal parts. Each part is called a semicircle.

The length of the boundary of a circle is called its circumference.

$$\text{Diameter} = 2 \times \text{radius}$$

$$\text{Radius} = \text{Diameter} \div 2$$



Exercise 7.3

Ques Find the diameter of each circle whose radius is given below:-

1. 2 cm

Soln:-

$$\text{Radius} = 2 \text{ cm}$$

$$\text{Diameter} = 2 \times \text{radius}$$

$$= 2 \times 2$$

$$= 4 \text{ cm}$$

$$\therefore \text{Diameter} = 4 \text{ cm}$$

2. 7 cm

Soln:-

$$\text{Radius} = 7 \text{ cm}$$

$$\text{Diameter} = 2 \times \text{radius}$$

$$= 2 \times 7$$

$$= 14$$

$$\therefore \text{Diameter} = 14 \text{ cm}$$

3. 9 cm

Soln:-

$$\text{Radius} = 9 \text{ cm}$$

$$\text{Diameter} = 2 \times \text{radius}$$

$$= 2 \times 9$$

$$= 18$$

$$\therefore \text{Diameter} = 18 \text{ cm}$$

4. 10 cm

Soln:-

$$\text{Radius} = 10 \text{ cm}$$

$$\text{Diameter} = 2 \times \text{radius}$$

$$= 2 \times 10$$

$$= 20 \text{ cm}$$

$$\therefore \text{Diameter} = 20 \text{ cm}$$

Q. Find the radius of each circle whose diameter is given below:-

1. 4cm

Soln:-
$$\begin{aligned}\text{Diameter} &= 4\text{ cm} \\ \text{Radius} &= \text{Diameter} \div 2 \\ &= 4 \div 2 \\ &= 2\end{aligned}$$

$\therefore \text{Radius} = 2\text{ cm}$

2. 6cm

Soln:-
$$\begin{aligned}\text{Diameter} &= 6\text{ cm} \\ \text{Radius} &= \text{Diameter} \div 2 \\ &= 6 \div 2 \\ &= 3\end{aligned}$$

$\therefore \text{Radius} = 3\text{ cm}$

3. 12 cm

Soln:-
$$\begin{aligned}\text{Diameter} &= 12\text{ cm} \\ \text{Radius} &= \text{Diameter} \div 2 \\ &= 12 \div 2 \\ &= 6\end{aligned}$$

$\therefore \text{Radius} = 6\text{ cm.}$

4. 18 cm

Soln:-
$$\begin{aligned}\text{Diameter} &= 18\text{ cm} \\ \text{Radius} &= \text{Diameter} \div 2 \\ &= 18 \div 2 \\ &= 9\end{aligned}$$

$\therefore \text{Radius} = 9\text{ cm}$

TANGRAM SHAPES: →

A tangram is an ancient puzzle that consists of seven flat shapes called tans. The tans are put together without overlapping to form shapes.

A tangram can be created by cutting a square into seven geometric shapes - five triangles, a square and a parallelogram.