

Chapter 7: Circles

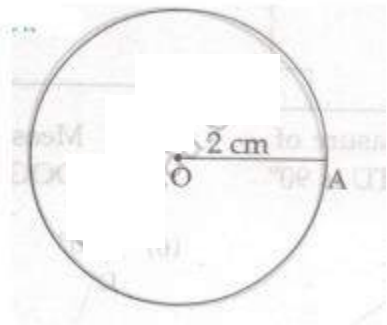
PROBLEM SET 28 [PAGE 42]

Problem Set 28 | Q 1.1 | Page 42

Draw circle with the radii given below.

2 cm

SOLUTION

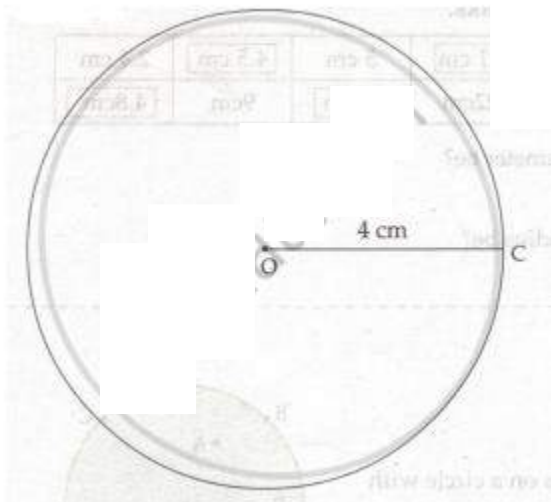


Problem Set 28 | Q 1.2 | Page 42

Draw a circle with the radii given below.

4 cm

SOLUTION

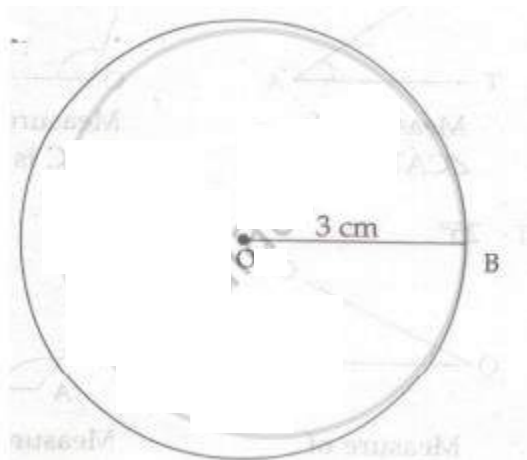


Problem Set 28 | Q 1.3 | Page 42

Draw circle with the radii given below.

3 cm

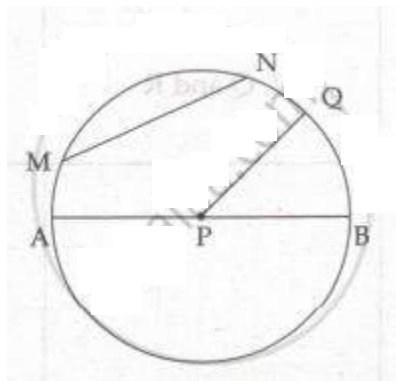
SOLUTION



Problem Set 28 | Q 2 | Page 42

Draw a circle of any radius. Show one diameter, one radius, and one chord on that circle.

SOLUTION



In a circle P is the centre.

AB is a diameter.

PQ is a radius

MN is a chord

PROBLEM SET 29 [PAGES 43 - 44]

Problem Set 29 | Q 1 | Page 43

If the radius of a circle is 5 cm, what will its diameter be?

SOLUTION

$$\begin{aligned}\text{Diameter} &= 2 \times \text{radius} \\ &= 2 \times 5 \\ &= 10 \text{ cm.}\end{aligned}$$

Problem Set 29 | Q 2 | Page 43

If the diameter of a circle is 6 cm, what will its radius be?

SOLUTION

$$\begin{aligned}\text{Radius} &= \text{diameter} \div 2 \\ &= 6 \div 2 \\ &= 3 \text{ cm}\end{aligned}$$

Problem Set 29 | Q 3 | Page 44

Complete the following table by filling in the blanks.

Radius	4cm		9cm	
Diameter		16cm		22cm

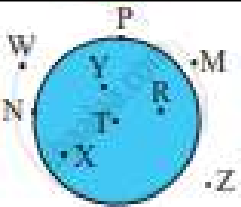
SOLUTION

Radius	4cm	8cm	9cm	11cm
Diameter	8cm	16cm	18cm	22cm

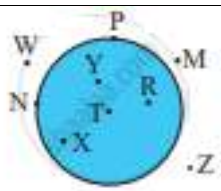
PROBLEM SET 30 [PAGE 44]

Problem Set 30 | Q 1 | Page 44

In the table below, write the names of the points in the interior and exterior of the circle and those on the circle.

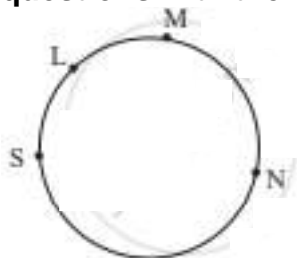
Diagram	Points in the interior of the circle	Points in the exterior of the circle	Points on the circle
			

SOLUTION

Diagram	Points in the interior of the circle	Points in the exterior of the circle	Points on the circle
	T, Y, R, and X	Z, M, and W	P and N

PROBLEM SET 31 [PAGE 45]**Problem Set 31 | Q 1 | Page 45**

In the figure given alongside, points S, L, M, and N are on the circle. Answer the questions with the help of the diagram.



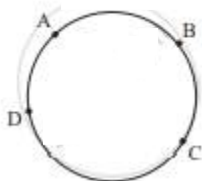
- Write the names of the arcs with end-points S and M.
- Write the names of the arcs with the end-points L and N.

SOLUTION

- Arcs with the endpoints S and M are, arc SLM and arc SNM.
- Arcs with the endpoints L and N are, arc LMN and arc LSN.

Problem Set 31 | Q 2 | Page 45

Write the names of arcs that points A, B, C, and D in the given circle give rise to.

**SOLUTION**

Arcs with the endpoints A and C are, arc ABC and arc ADC.

Arcs with the endpoints B and D are, arc BAD and arc BCD.

Problem Set 31 | Q 3 | Page 45

Give the names of the arcs that are made by points P, Q, R, S, and T in the figure.



SOLUTION

Taking endpoints : P and R, arc PQR, arc PTR.

Taking endpoints: Q and S, arc QRS, arc QTS.

Taking endpoints: R and T, arc RST, arc RPT.

Taking endpoints: S and P, arc STP, arc SRP.

Taking endpoints: Q and T, arc QTP, arc QST.

Problem Set 31 | Q 4 | Page 45

Measure and note down the circumference of different circular objects.
(It is convenient to use a measuring tape for this purpose.)

SOLUTION

Students do it by yourself.