PRISM WORLD

Std.: 8 (English) **Mathematics** **Marks: 20**

Date: **Time: 1 hour**

Chapter: 17

Q.1 Choose the correct alternative. **(3)**

1) The segment containing the centre of the circle is called ……

a. minor segment b. Tangent c. major segment d. circumference

2) If two diameters of a circle intersect each other at right angles, then quadrilateral formed by joining their end points is.

a. rhombus b. rectangle c. parallelogram d. square

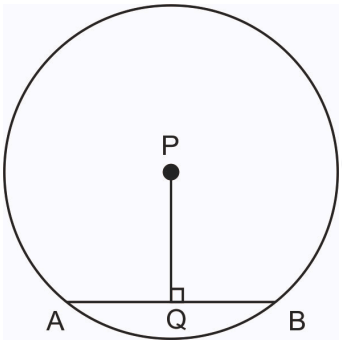
3) Each radius of the circle is also the chord of the circle.

a. True b. False

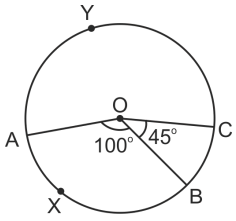
Q.2 Attempt the following questions. (Any two) **(4)**

1)

In a circle with centre P, chord AB is drawn of length 13 cm, seg PQ ⊥ chord AB, then find l(QB).

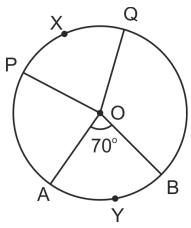


2) In the given figure m (arc BC) and m (arc AYC).



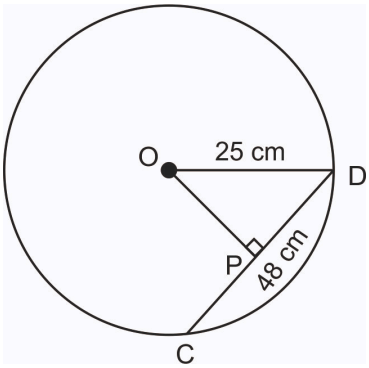
3)

In the given figure m (arc AYB) = m (arc PXQ) then m ∠POQ = ...



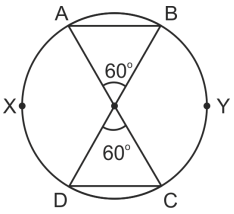
Q.3 Solve the following questions. (Any Three) **(9)**

1) Radius of a circle with centre O is 25 cm. Find the distance of a chord from the centre if length of the chord is 48 cm.

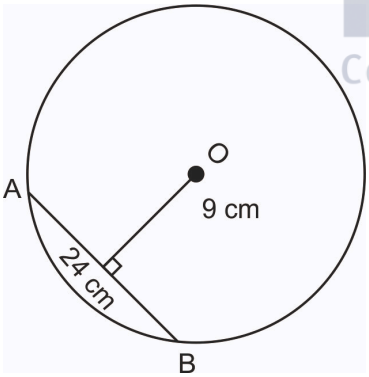


2) Find the length of a chord which is at a distance of 5 cm from the centre of a circle of radius 13 cm.

3) In the given chord AB is congruent to chord CD, AC and BD are the diameter of the circle with centre O.
Find (i) m (arc AXD) (ii) Why are chords AB and CD congruent. (iii) Write other pairs of congruent arcs.



4) O is centre of the circle. Find the length of radius, if the chord of length 24 cm is at a distance of 9 cm from the centre of the circle.



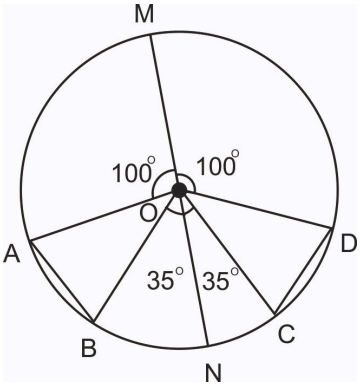
Q.4 Answer the following (Any one) **(4)**

1) In the adjoining figure O is the centre of the circle whose diameter is MN. Measures of some central angles are given in the figure. Hence find the following.

(1) m∠AOB and m∠COD

(2) Show that arc AB ≅ arc CD.

(3) Show that chord AB ≅ chord CD



2)

From the figure find PQ, given AB || CD, AB = 6, CD, AB = 6, CD = 8 cm & radius = 5 cm.