

SATISH CHANDRA MEMORIAL SCHOOL

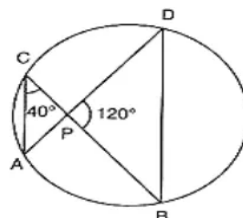
CH- 5 EXTRA QUESTIONS

1. AD is a diameter of a circle and AB is a chord. If AD = 34 cm, AB = 30 cm, the distance of AB from the centre of the circle is

- (a) 17 cm (b) 15 cm (c) 4 cm (d) 8 cm

2. In figure, if $\angle ACB = 40^\circ$, $\angle DPB = 120^\circ$, find $\angle CBD$.

- (a) 45°
(b) 20°
(c) 30°
(d) 120°



3. In a circle AB is diameter and C is a point on the circle, which of following is the measure of $\angle ACB$?

- (a) 60° (b) 90° (c) 180° (d) None of these

4. In a circle with centre O, radius OA = 5 cm and chord AB = 8 cm. If $OC \perp AB$, then which of the following is length of AC?

- (a) 2 cm (b) 3 cm (c) 4 cm (d) 5 cm

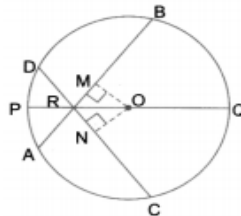
(a) Both Assertion (A) and Reason (R) are true and Reason (R) is the correct explanation of the Assertion (A).

(b) Both Assertion (A) and Reason (R) are true, but Reason (R) is not the correct explanation of the Assertion (A).

(c) Assertion (A) is true, but Reason (R) is false.

(d) Assertion (A) is false, but Reason (R) is true.

5. **Assertion (A):** AB and CD are two chords of a circle with centre at O intersecting each other at point R as shown in the figure then $\angle BRQ = \angle CRQ$.



Reason (R): Equal chord are always equidistant from the centre of the circle.

6. Assertion (A): The exterior angle formed by extending one side of a cyclic quadrilateral is equal to the interior opposite angle.

Reason (R): The exterior angle and the adjacent interior angle are supplementary, and the interior opposite angle is also supplementary to the adjacent interior angle.

7. ICC World Cup Final Match is being played between INDIA and NEW ZEALAND. Toss is won by NEW ZEALAND and his captain decided to Bowl first. He places the three fielders at boundary line at points A, B, and D. Position of bowler is at point P.

Captain also keeps himself at the boundary on the point C. Angle of captain from the fielder B and centre point 'O' is of 40° measure. In the given figure, O is the centre of the circular stadium.

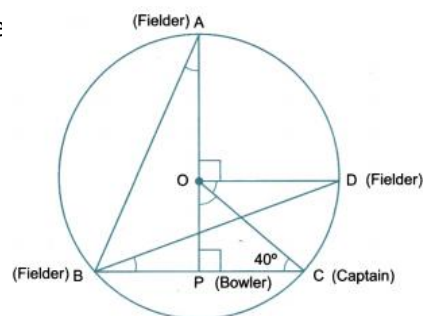
(i) What angle do the bowler 'P' and the fielder 'C' subtend at the

(ii) What angle fielders 'D' and 'C' make at the centre point 'O'?

(iii) At what angle is fielder B from fielders 'D' and 'C'?

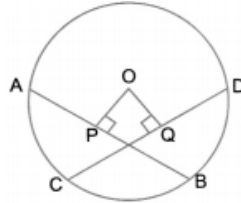
OR

At what angle is fielder 'A' from the fielder 'B' and bowler 'P'?



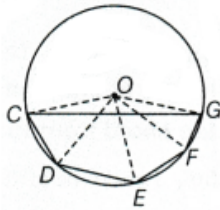
8. AB and CD are two parallel chords of a circle which are on opposite sides of the centre such that $AB = 24$ cm and $CD = 10$ cm and the distance between AB and CD is 17 cm. Find the radius of the circle.

9. In the adjoining figure, O is the centre of the circle and $OP = OQ$. If $AP = 4$ cm, then find the length of CD.

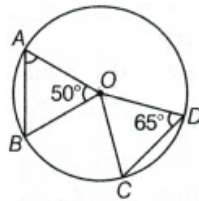


10. Draw ΔPQR such that $PQ = 6$ cm, $\angle P = 120^\circ$ and $PR = 4$ cm. Draw the circumcircle of ΔPQR .

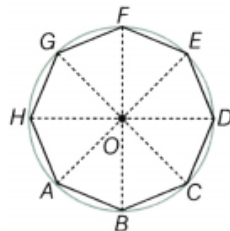
11. In the figure given below, O is the centre of the circle and $CD = DE = EF = GF$. If the $\angle COD = 40^\circ$, then find the reflex $\angle COG$.



12. In the given figure, O is the centre of the circle. If $AB = CD$ and $\angle AOB = 50^\circ$, then find $\angle OCD$.



13. If O is the centre of a circle and points A, B, C, D, E, F, G, and H are on the circle such that $AB = BC = CD = DE = EF = FG = GH = HA$. Find $\angle AOB$, $\angle AOC$, $\angle DOF$, and $\angle EOH$.



14. Two concentric circles with centre O have A, B, C, and D as points of intersection with a line l as shown in the figure. If $AD = 12$ cm and $BC = 8$ cm, then find the lengths of AB and CD.

