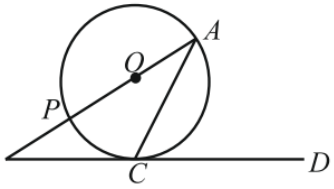
UDAAN 2024

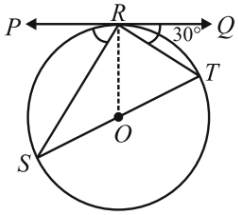
Circles

DHA-02

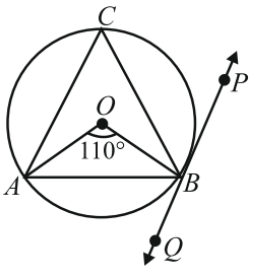
1. In the given figure, O is the centre of the circle and BCD is tangent to it at C. Prove that ∠BAC + ∠ACD = 90°.



2. In the figure, PQ is tangent at a point R of the circle with centre O. If ∠TRQ = 30°, ∠PRS.



3. In figure, AB is a chord of circle and PQ is a tangent at point B of the circle. If ∠AOB = 110°, then ∠ABQ is



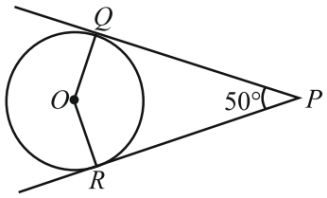
(A) 45° (B) 70°
(C) 55° (D) 35°

4. 'O' is the centre of the circle. PQ is tangent to the circle and secant PAB passes through the centre O. If PQ = 5 cm and PA = 1 cm, then radius of the circle is:

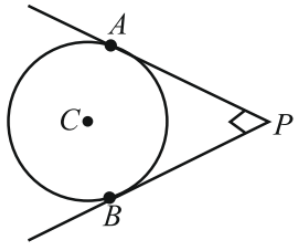
(A) 8 cm (B) 12 cm
(C) 10 cm (D) 6 cm

5. If PA and PB are tangents from outside point 'P' such that PA = 10 cm and ∠APB = 60°. Find the length of chord AB.

6. In the given figure PQ, and PR are tangents to the circle with centre O such that ∠QPR = 50°, then find ∠OQR.

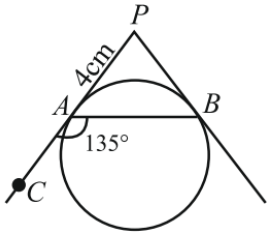


7. In fig., PA and PB are two tangents drawn from an external point P to a circle with centre C and radius 4 cm. If PA ⊥ PB, then find the length of each tangent.



8. Prove that opposite sides of a quadrilateral circumscribing a circle subtend supplementary angles at the centre of the circle.

9. In the given figure, PA and PB are tangents to a circle from an external point P such that PA = 4 cm and ∠BAC = 135°. Find the length of chord AB.



Note: Kindly find the Video Solution of DHAs Questions in the DPPs Section.

Answer Key

1. (Proof)
2. (60°)
3. (C)
4. (B)
5. (10 cm)
6. (25°)
7. (4 cm)
8. (Proof)
9. ($4\sqrt{2}$ cm)

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