NCERT Mathematics Class 10 Exemplar Ch 9 Circles Part 1

EXERCISE 9.1

1. If radii of two concentric circles are 4 cm and 5 cm, then the length of each chord of one circle which is tangent to the other circle is

(A) $3\,cm$ (B) $6\,cm$ (C) $9\,cm$ (D) $1\,cm$

Answer: B

2. In Fig. 9.3, if $\angle AOB = 125°$, then $\angle$ COD is equal to

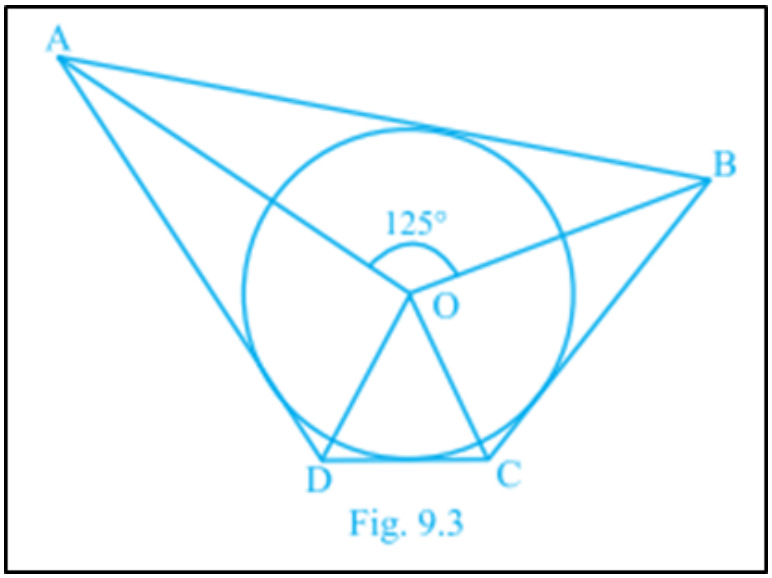

Fig. 9.3

(A) 62.5°

(B) 45°

(C) 35°

(D) 55°

Answer: D

3. In Fig. 9.4, AB is a chord of the circle and AOC is its diameter such that $\angle ACB = 50°$. If AT is the tangent to the circle at the point A, then ∠ BAT is equal to

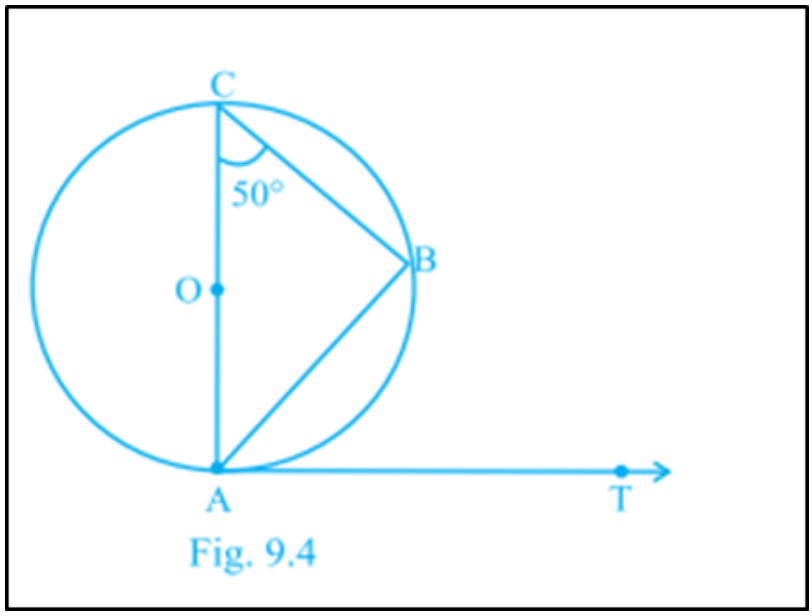

Fig. 9.4

(A) 65°

(B) 60°

(C) 50°

(D) 40°

Answer: C

4. From a point P which is at a distance of 13 cm from the centre O of a circle of radius 5 cm, the pair of tangents PQ and PR to the circle are drawn. Then the area of the quadrilateral PQOR is

(A) $60cm^2$ (B) $65cm^2$ (C) $30cm^2$ (D) $32.5cm^2$

Answer: A

5. At one end A of a diameter AB of a circle of radius 5 cm, tangent XAY is drawn to the circle. The length of the chord CD parallel to XY and at a distance 8 cm from A is

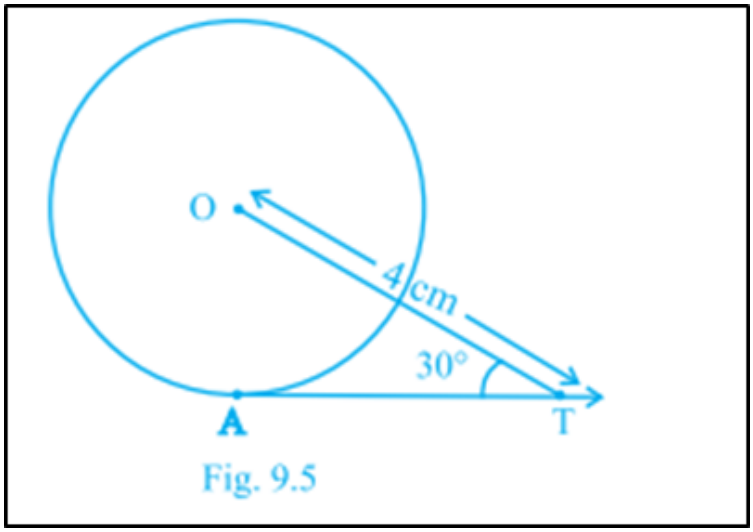

Fig. 9.5

(A) 4 *cm*

(B) 5 *cm*

(C) 6 *cm*

(D) 8 *cm*

Answer: D