

CLASS 9

10.CIRCLES

1 EXERCISE 1

1. AD is a diameter of a circle and AB is a chord. If $AD = 34\text{cm}$, $AB = 30\text{cm}$, the distance of AB from the centre of the circle is:
 - (a) 17cm
 - (b) 15cm
 - (c) 4cm
 - (d) 8cm
2. In (Figure 1), if $OA = 5\text{cm}$, $AB = 8\text{cm}$ and OD is perpendicular to AB , then CD is equal to:

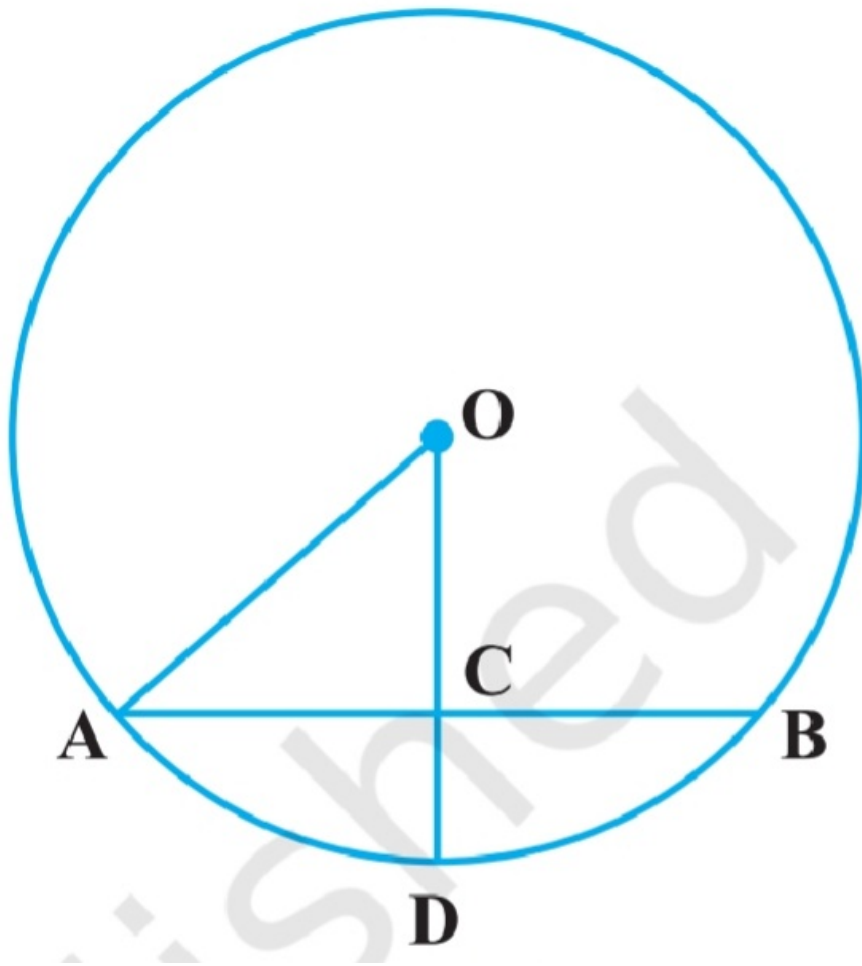


Figure 1

- (a) 2cm
 - (b) 3cm
 - (c) 4cm
 - (d) 5cm
3. If $AB = 12\text{cm}$, $BC = 16\text{cm}$ and AB is perpendicular to BC , then the radius of the circle passing through the points A , B and C is:
- (a) 6cm
 - (b) 8cm
 - (c) 10cm

(d) 12cm

4. In (Figure 2), if $\angle ABC = 20^\circ$, then $\angle AOC$ is equal to:

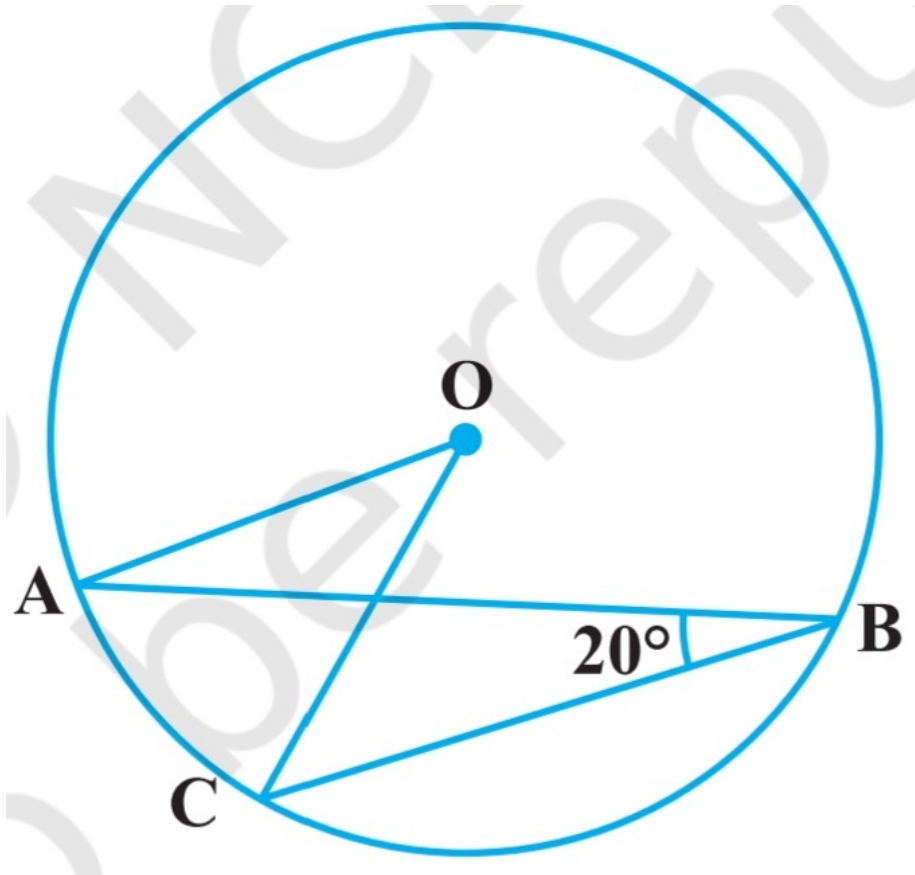


Figure 2

(a) 20°

(b) 40°

(c) 60°

(d) 10°

5. In (Figure 3), if AOB is a diameter of the circle and $AC = BC$, then $\angle CAB$ is equal to:

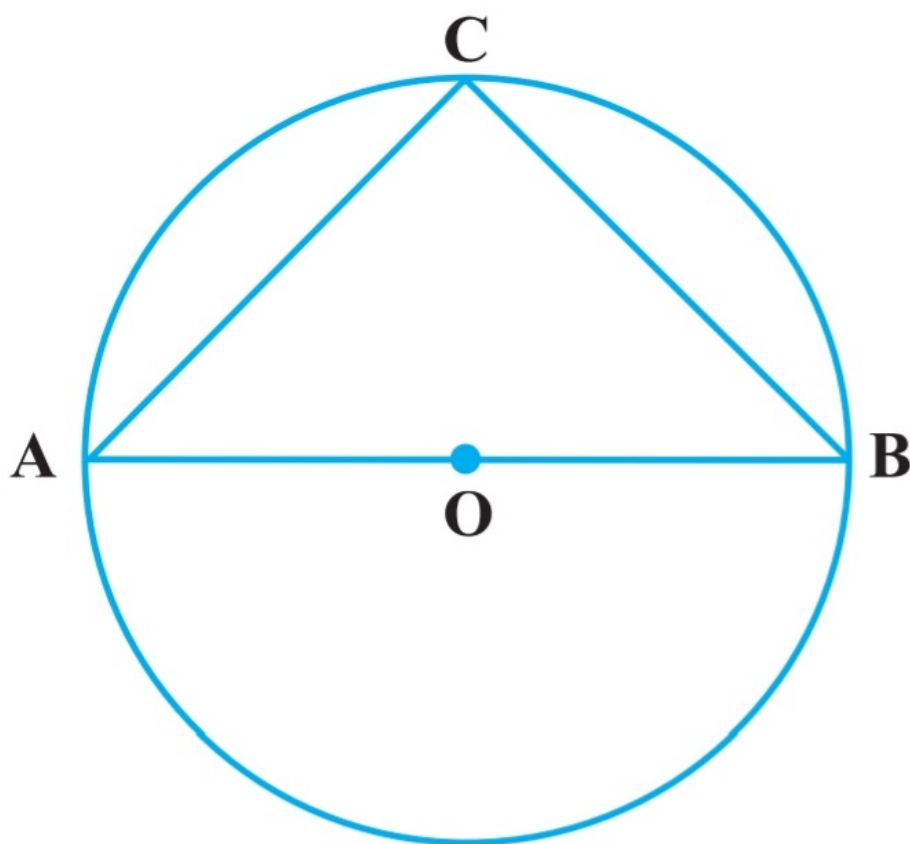


Figure 3

- (a) 30°
- (b) 60°
- (c) 90°
- (d) 45°

6. In (Figure 4), if $\angle OAB = 40^\circ$, then $\angle ACB$ is equal to:

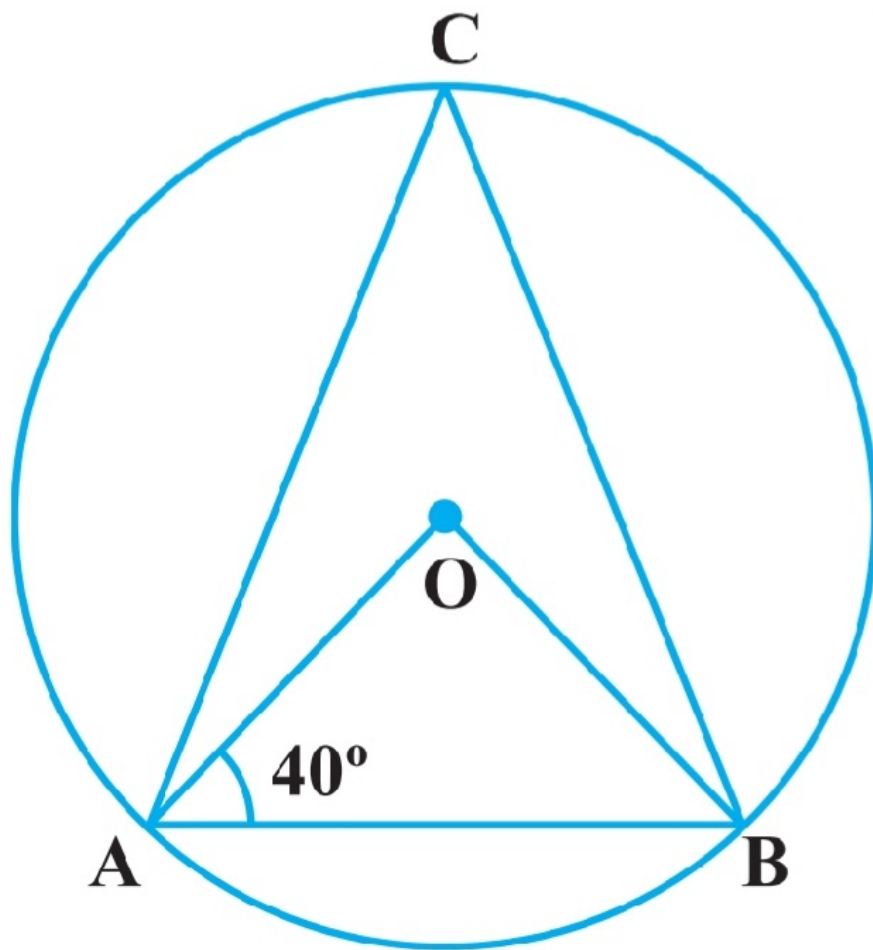


Figure 4

- (a) 50°
- (b) 40°
- (c) 60°
- (d) 70°

7. In (Figure 5), if $\angle DAB = 60^\circ$, $\angle ABD = 50^\circ$, then $\angle ACB$ is equal to:

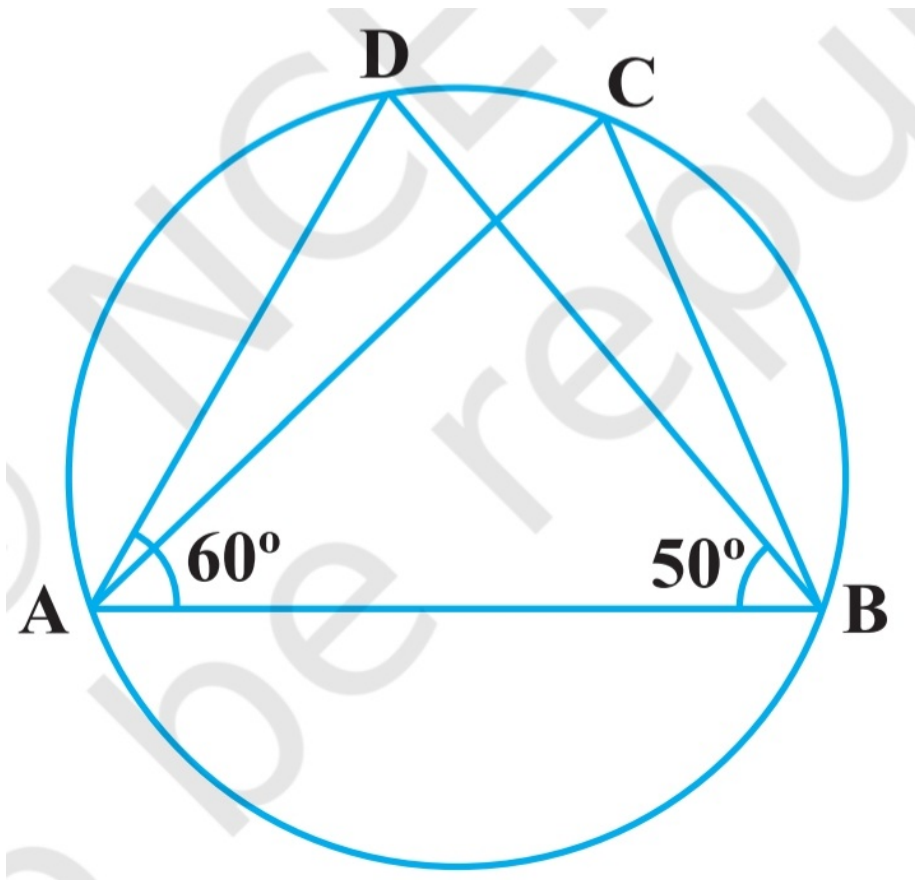


Figure 5

- (a) 60°
 - (b) 50°
 - (c) 70°
 - (d) 80°
8. $ABCD$ is a cyclic quadrilateral such that AB is a diameter of the circle circumscribing it and $\angle ADC = 140^\circ$, then $\angle BAC$ is equal to:
- (a) 80°
 - (b) 50°
 - (c) 40°
 - (d) 30°
9. In (Figure 6), BC is a diameter of the circle and $\angle BAO = 60^\circ$. Then $\angle ADC$ is equal to:

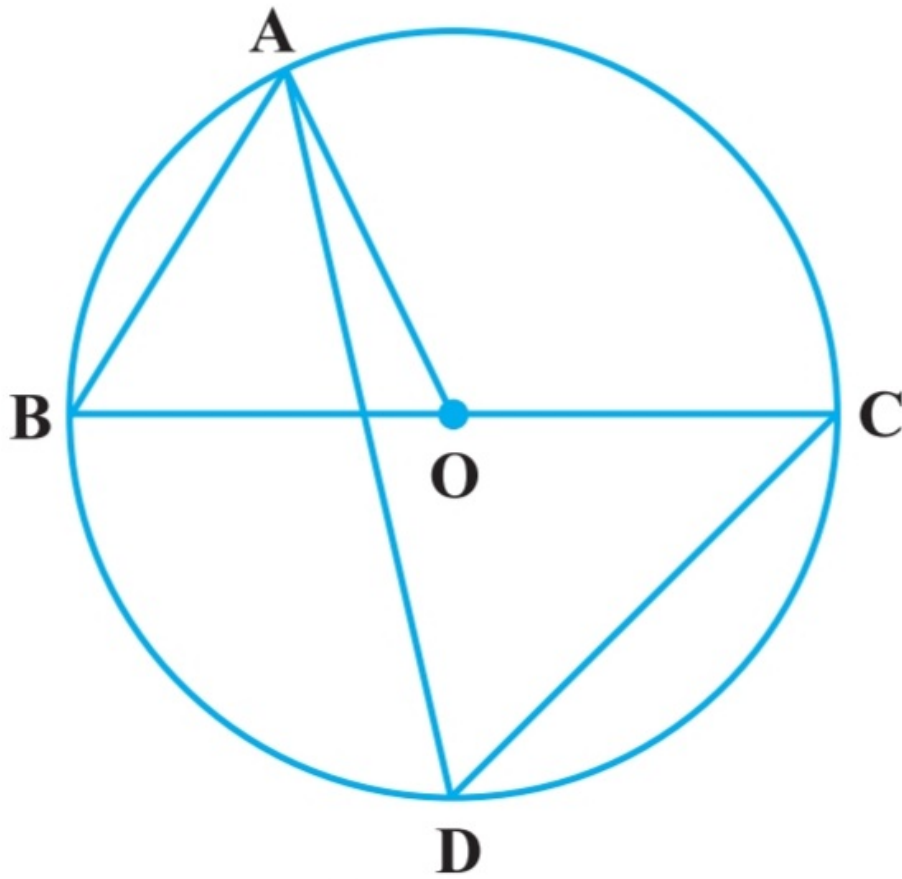


Figure 6

- (a) 30°
- (b) 45°
- (c) 60°
- (d) 120°

10. In (Figure 7), $\angle AOB = 90^\circ$ and $\angle ABC = 30^\circ$, then $\angle CAO$ is equal to:

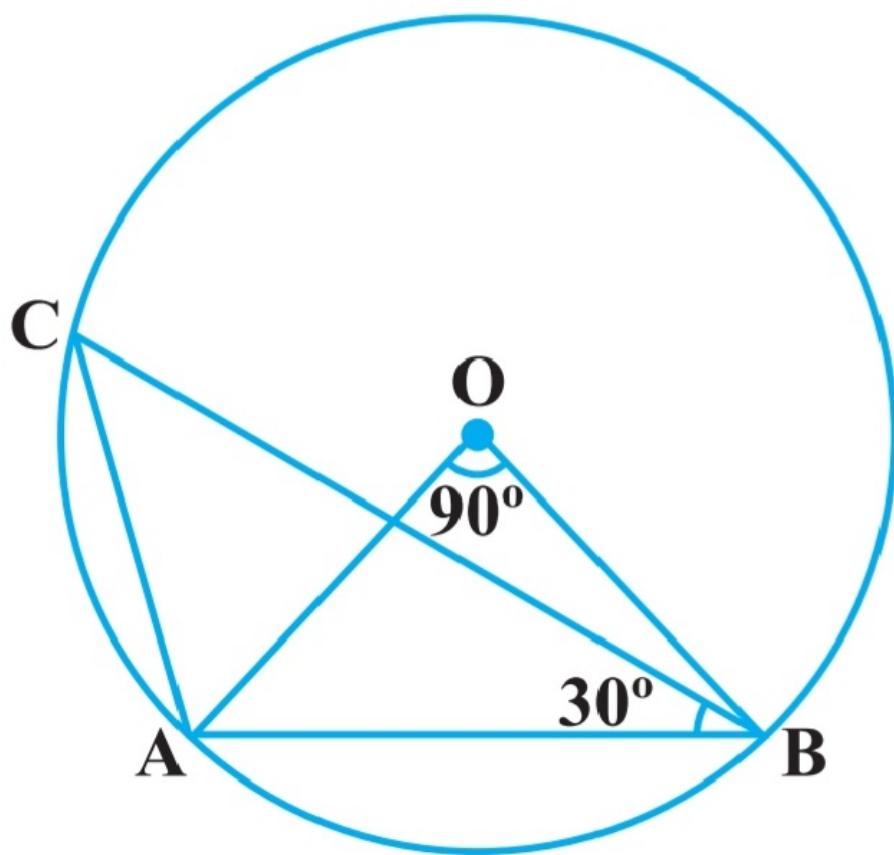


Figure 7

- (a) 30°
- (b) 45°
- (c) 90°
- (d) 60°