CLASS 9
10.CIRCLES

1 EXERCISE 1

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

   (a) 17cm

   (b) 15cm

   (c) 4cm

   (d) 8cm

2. In Fig. 1, if $OA = 5cm, AB = 8cm$ and OD is perpendicular to AB, then CD is equal to:

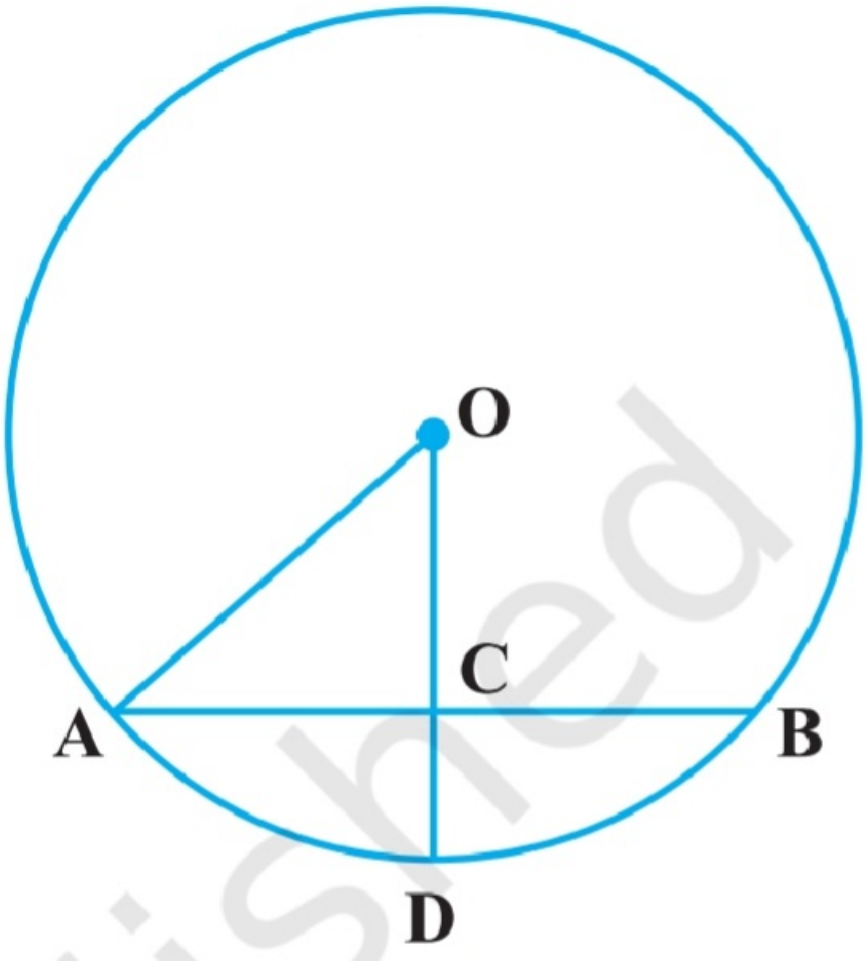

Figure 1

(a) 2cm

(b) 3cm

(c) 4cm

(d) 5cm

3. If $AB = 12cm, BC = 16cm$ 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 Fig. 2, if $\angle ABC = 20^\circ$, then $\angle AOC$ is equal to:

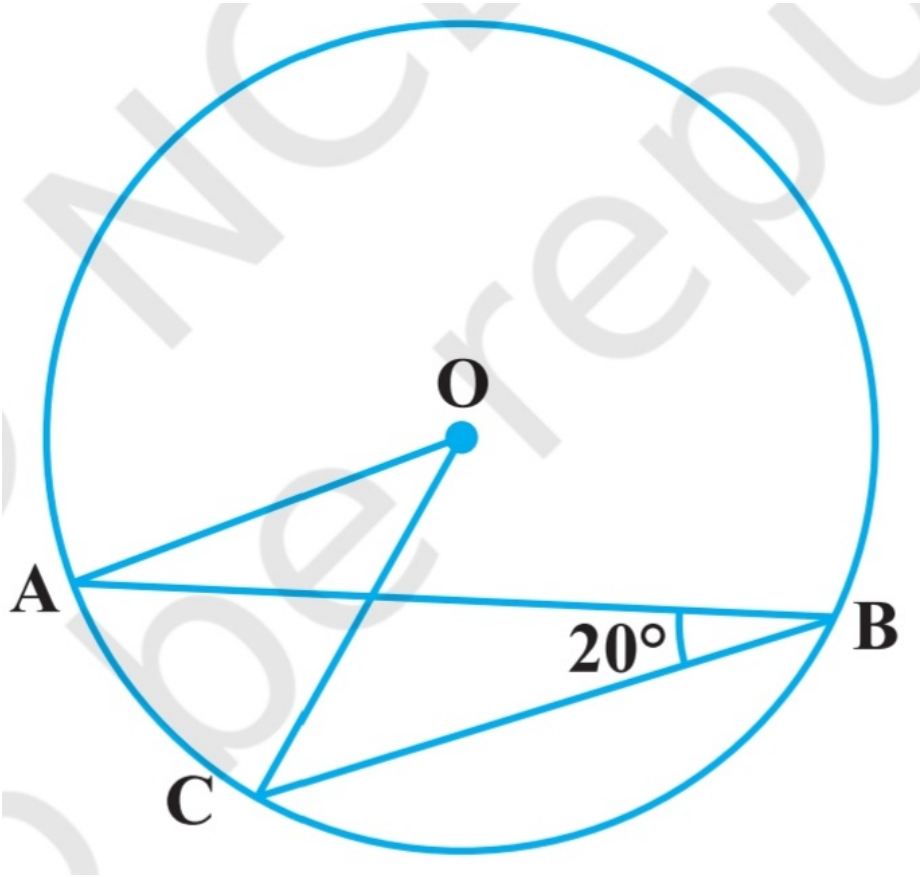

Figure 2

(a) 20°
(b) 40°
(c) 60°
(d) 10°

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

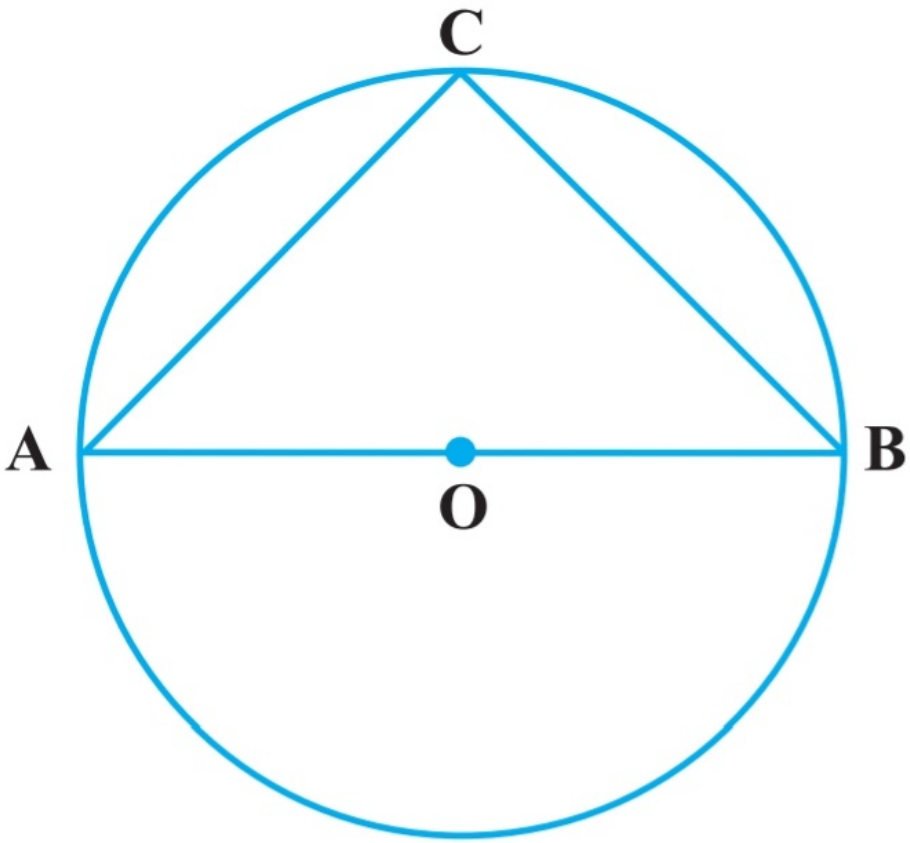

Figure 3

(a) 30°
(b) 60°
(c) 90°
(d) 45°

6. In Fig. 4, if $\angle OAB = 40°$, then $\angle ACB$ is equal to:

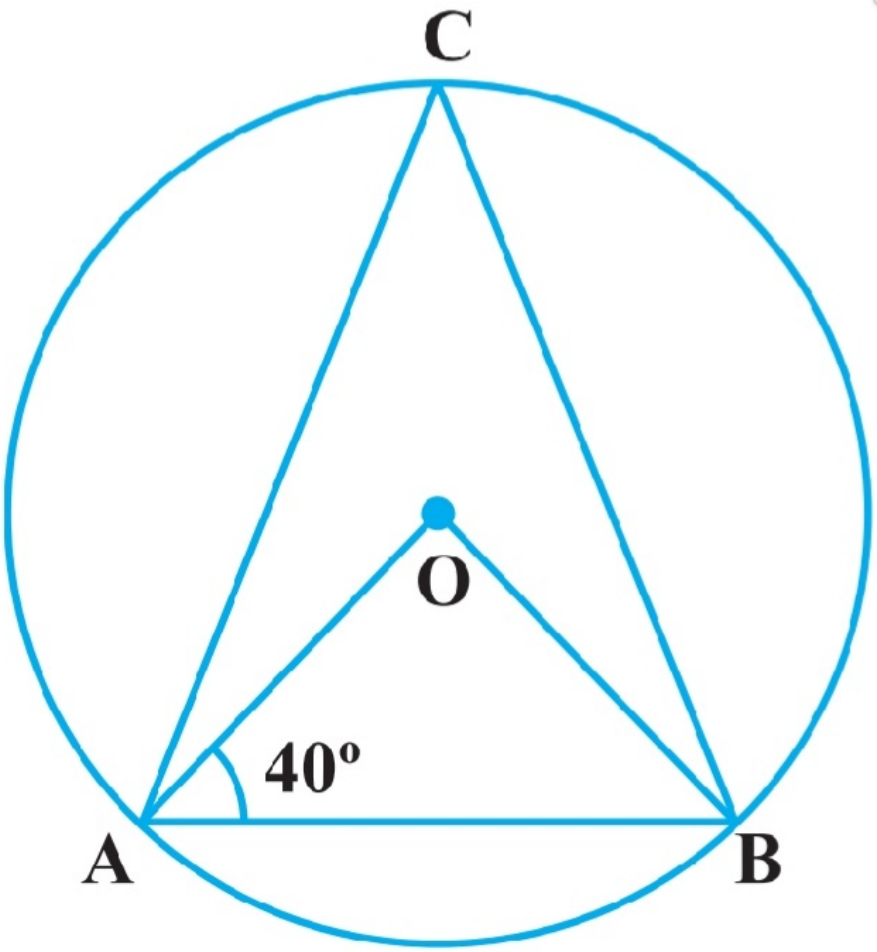

Figure 4

(a) 50°
(b) 40°
(c) 60°
(d) 70°

7. In Fig. 5, if $\angle DAB = 60°$, $\angle ABD = 50°$, then $\angle ACB$ is equal to:

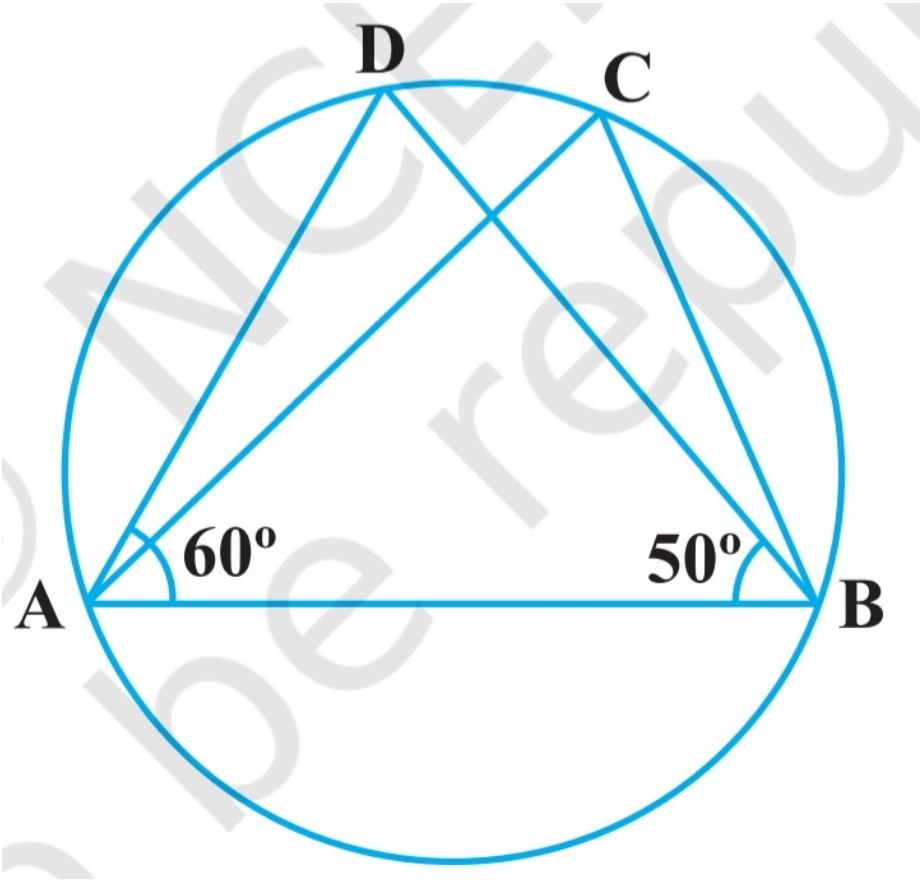

Figure 5

(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 $\angle ADC = 140°$, then $\angle BAC$ is equal to:

(a) 80°

(b) 50°

(c) 40°

(d) 30°

9. In Fig. 6, BC is a diameter of the circle and $\angle BAO = 60°$. Then $\angle ADC$ is equal to:

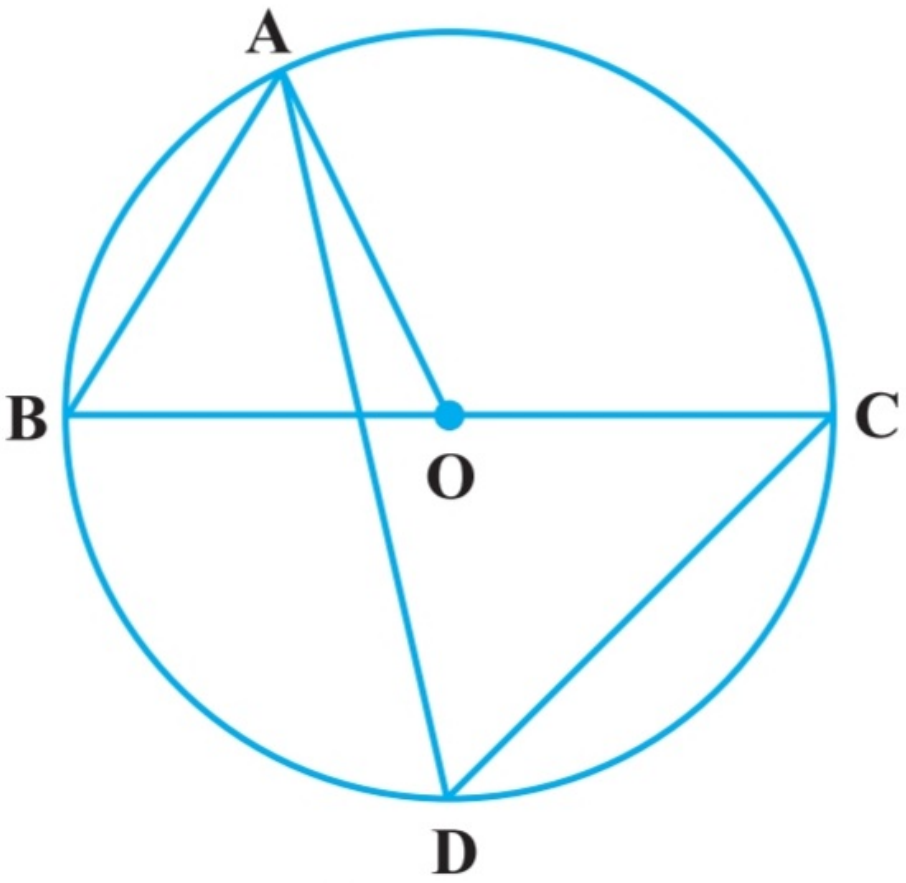

Figure 6

(a) 30°
(b) 45°
(c) 60°
(d) 120°

10. In Fig. 7, $\angle AOB = 90°$ and $\angle ABC = 30°$, then $\angle CAO$ is equal to:

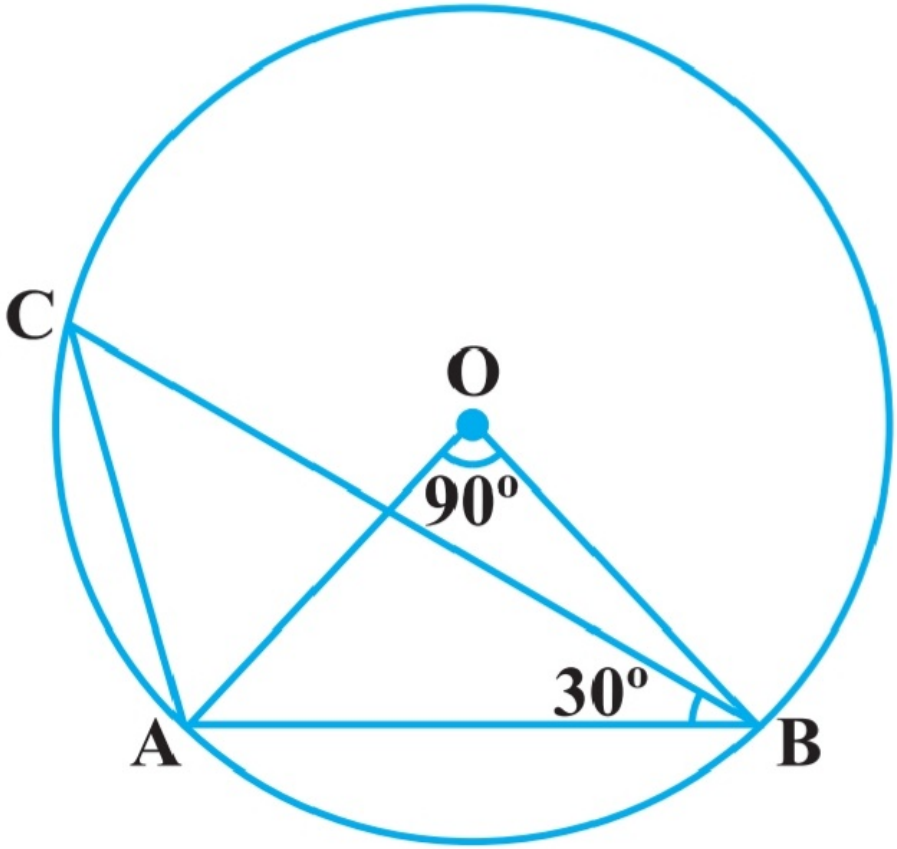

Figure 7

(a) 30°
(b) 45°
(c) 90°
(d) 60°