

CLASS-9
CHAPTER-10
CIRCLES

write **True** or **False** and justify your answer in each of the following:

1. Two chords AB and CD of a circle are each at distances $4cm$ from the centre. Then $AB = CD$.
2. Two chords AB and AC of a circle with centre O are on the opposite sides of OA . Then $\angle OAB = \angle OAC$.
3. Two congruent circles with centres O and O' intersect at two points A and B . Then $\angle AOB = \angle A'O'B'$.
4. Through three collinear points a circle can be drawn.
5. A circle of radius $3cm$ can be drawn through two points A, B such that $AB = 6cm$.
6. If AOB is a diameter of a circle and C is a point on the circle, then $AC^2 + BC^2 = AB^2$.
7. $ABCD$ is a cyclic quadrilateral such that $\angle A = 90^\circ, \angle B = 70^\circ, \angle C = 95^\circ$ and $\angle D = 105^\circ$.
8. If A, B, C, D are four points such that $\angle BAC = 30^\circ, \angle BDC = 60^\circ$, then D is the centre of the circle through A, B and C .
9. If A, B, C and D are four points such that $\angle BAC = 45^\circ$ and $\angle BDC = 45^\circ$, then A, B, C, D are concyclic.
10. In fig 1 if AOB is a diameter and $\angle ADC = 120^\circ$ then $\angle CAB = 30^\circ$.

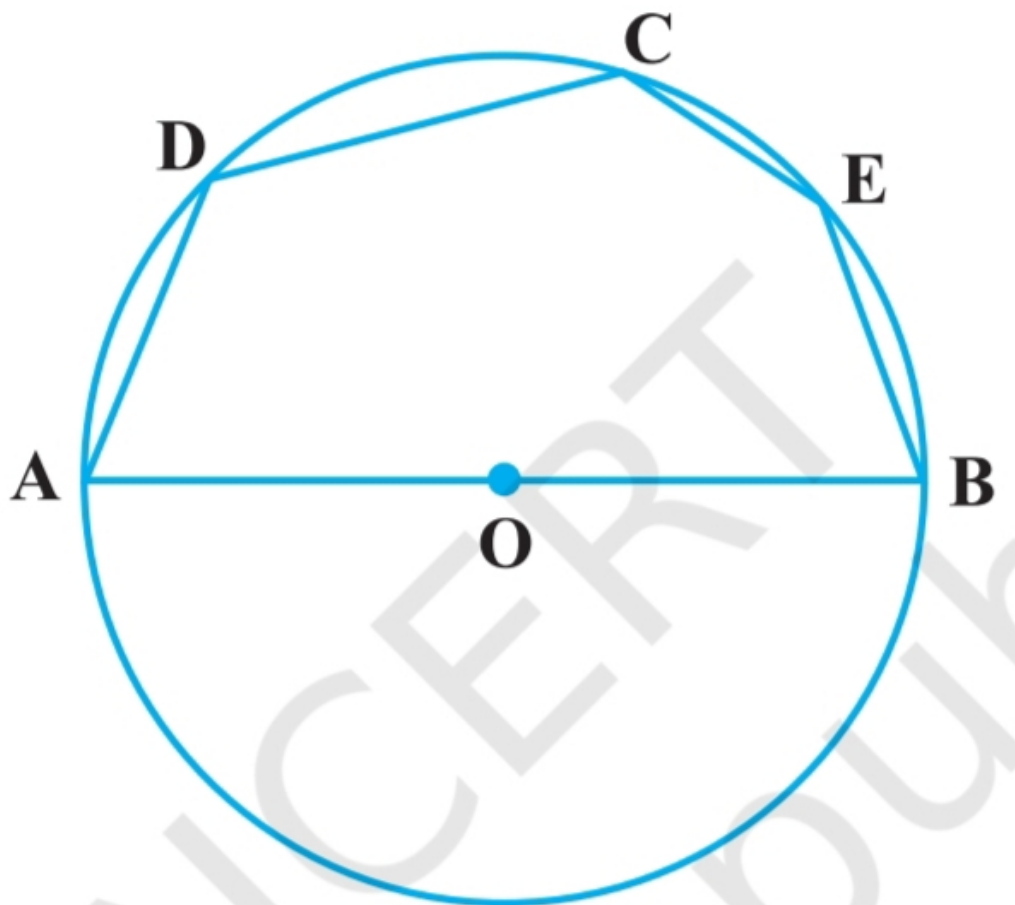


Figure 1