

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  $\triangle AOB$  if  $AOB$  is a diameter and  $\angle ADC = 120^\circ$  then  $\angle CAB = 30^\circ$ .

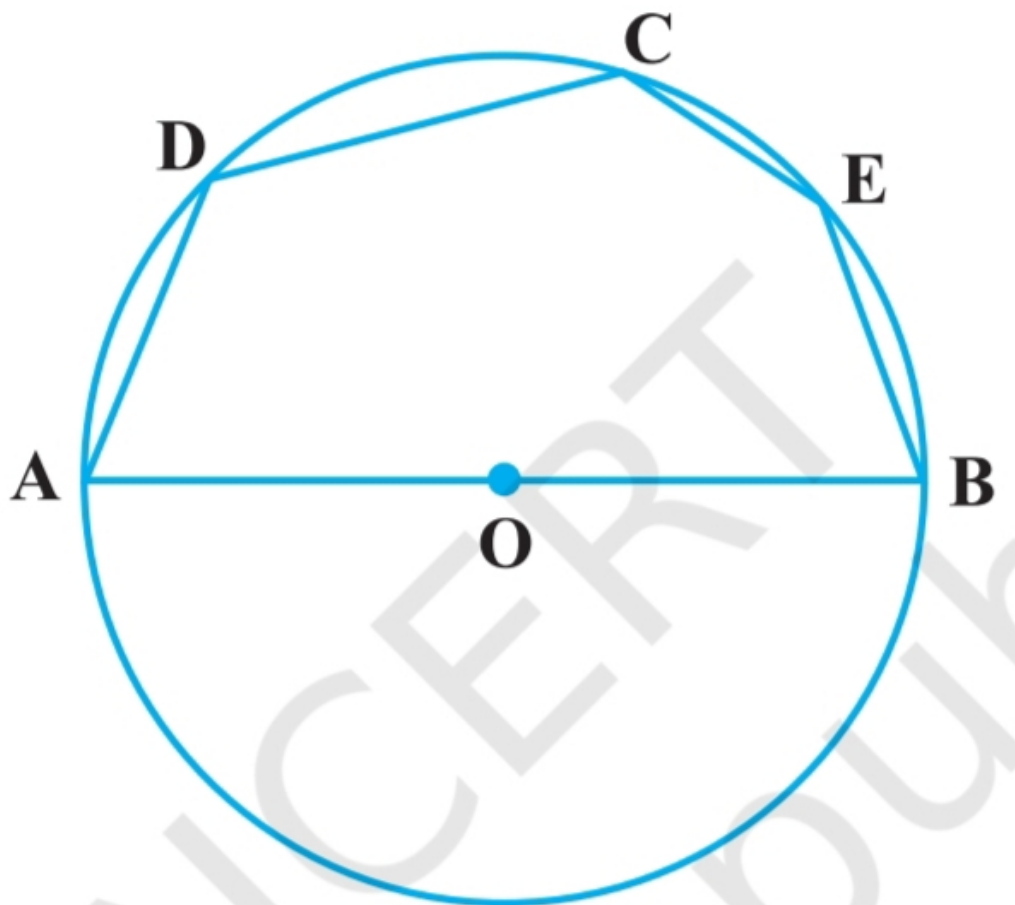


Figure 1