

Test
Circles
class-9th

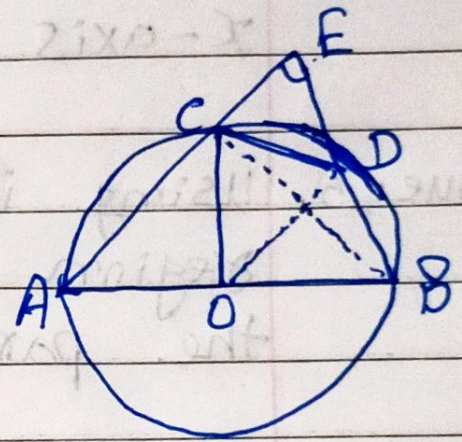
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- Que-1 If two circles intersect at two points, prove that their centres lie on the perpendicular bisector of the common chord.
- Que-2 If two intersecting chords of a circle make equal angles with the diameter passing through their point of intersection, prove that the chords are equal.
- Que-3 Two circles of radii 5 cm and 3 cm intersect at two points and the distance between their centres is 4 cm. Find the length of the common chord.
- Que-4 If two equal chords of a circle intersect within the circle, prove that the segments of one chord are equal to corresponding segments of the other chord.
- Que-5 Three girls Reshma, Salma and Mandip are playing a game by standing on a circle of radius 5 m drawn in a park. Reshma throws a ball to Salma, Salma to Mandip, Mandip to Reshma. If the distance between Reshma and Salma and between Salma and Mandip is 6 m each, what is the distance between Reshma and Mandip?

Que.6 A circular park of radius 20 m is situated in a colony. Three boys Ankur, Syed and David are sitting at equal distance on its boundary each having a toy telephone in his hands to talk each other. Find the length of the string of each phone.

Que.7 In Fig., AB is a diameter of the circle, CD is a chord equal to the radius of the circle. AC & BD when extended intersect at a point E . Prove that $\angle AEB = 60^\circ$



Que.8 Prove that the quadrilateral formed (if possible) by the internal angle bisectors of any quadrilateral is cyclic.

Que.9 If the non-parallel sides of a trapezium are equal, prove that it is cyclic.