

PH: 9835859669

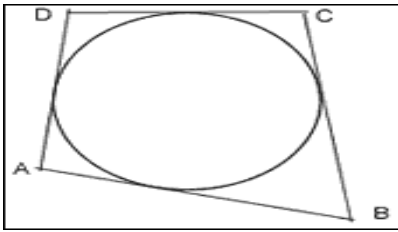
# JSUNIL TUTORIAL

PUNJABI COLONY GALI 01

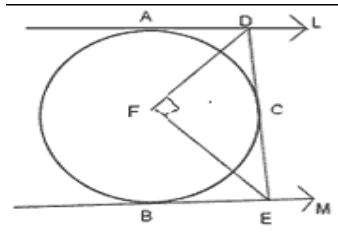
## Tangent to a circle X

### Test paper -1

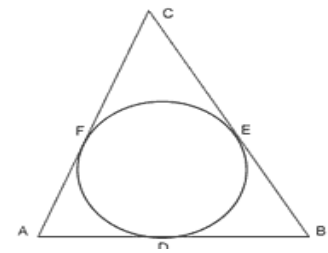
1. In the given figure, a circle touches all the four sides of a quadrilateral ABCD whose sides are AB = 6cm, BC = 7cm and CD = 4cm. Find AD.



For Q 1→

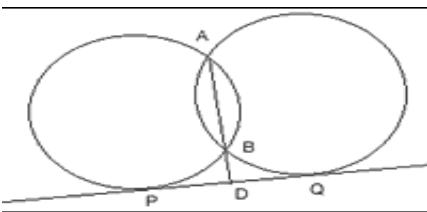


for Q2→

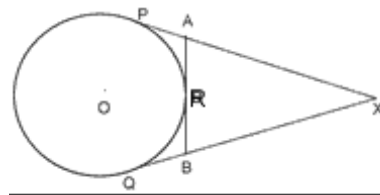


for Q4→

- Tangent to a circle is a line which intersects the circle in exactly one point.
- In figure. l and m are two parallel tangents at A and B. The tangent at C makes an intercept DE between the tangent l and m. Prove that  $\angle DEF = 90^\circ$
- If all the sides of a parallelogram touch a circle, show that the Parallelogram is a rhombus.
- In figure, a circle is inscribed in a having sides AB = 12 cm, BC = 8 cm and AC = 10cm. Find AD, BE and CF.
- A circle is touching the side BC of a  $\Delta ABC$  at P and is touching AB and AC when produced at Q and R. Prove that  $AQ = \frac{1}{2}$  (Perimeter of  $\Delta ABC$ )
- In figure. Two circles intersect each other at A and B .the common chord AB is produced to meet the common tangent PQ to the circle at D. Prove that DP = DQ.



forQ6. →



For Q7→

- In figure. XP and XQ are two tangents to a circle with Centre O from a point X out side the circle. ARB is a tangent to the circle at R. prove that  $XA + AR = XB + BR$ .
- A circle touches all the four sides a quadrilateral ABCD. Prove that the angles Subtended at the centre of the circle by the opposite sides are supplementary.
- If PA and PB are two tangents drawn from a point P to a circle with centre O touching it at A and B, Prove that OP is the perpendicular bisector of AB.
- If PAB is a secant to a circle intersecting it at A and B and PT is a tangent Then  $PA.PB = PT^2$ .