

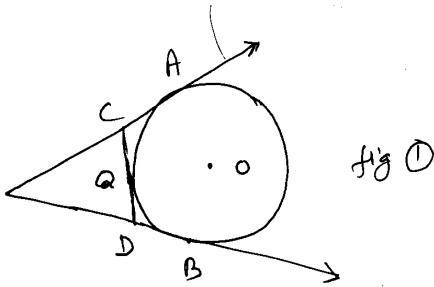
CBSE TEST PAPER-01

MATHEMATICS (Class-10)

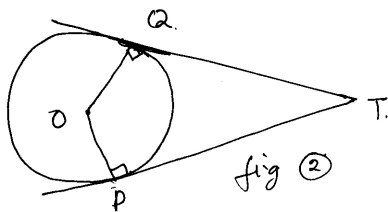
Chapter : Circles

1 Mark Questions

1. In the fig.1 PA and PB are tangents to the circle with centre O drawn from an external point P. CD is a third tangent touching the circle at Q. If $PB=10\text{cm}$ $PQ=2\text{ cm}$. What is the length of PC?



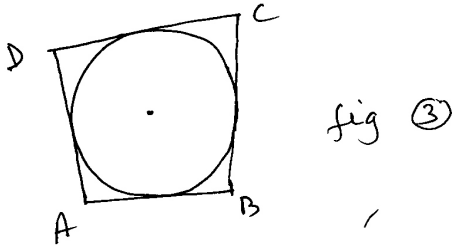
2. The length of tangent from point A at a distance of 5 cm. from the centre of the circle is 4 cm. What will be the radius of the circle?
3. Two tangents TP and TQ are drawn from an external point 'T' to a circle with centre O as shown in fig they are inclined to each other at an angle of 100° then what is the value of $\angle POQ$?



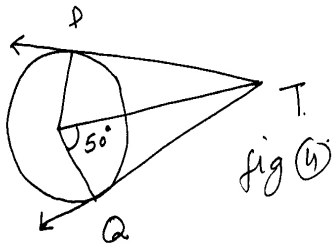
4. How many tangents can be drawn to a circle from a point outside the circle?

2/3 MARKS

5. In fig, a circle touches all the four sides of a quadrilateral ABCD whose sides $AB = 8\text{ cm.}$, $BC = 9\text{ cm.}$ and $CD = 6\text{ cm.}$ find AD.



6. What is the distance between two parallel tangents of a circle of the radius 4 cm.?
7. How many tangents can be drawn to a circle from a point inside the circle.
8. TP and TQ are tangents to the circle with centre O if $\angle TOQ = 50^\circ$ find $\angle OTQ$.



9. If O is the centre of two concentric circles of radius 5 cm. and 13 cm. if AB is chord of larger circle which touches the smaller circle. Find the length of chord AB.
10. In the adjoining figure (fig. 5) a circle is inscribed in a quadrilateral ABCD in which $\angle B = 90^\circ$. If $AD = 23\text{cm}$, $AB = 29\text{cm}$, and $DS = 5\text{cm}$. find the radius of the circle.

