

Chapter 10 – Circles

MM 20

Class X

Time 1h

1 Mark Each

1. Common point of tangent and circle is called _____
2. At a given point on the circle _____ tangent (s) can be drawn.

2 Marks Each

3. A circle touches the side QR of ΔPQR at point A and touches PQ and PR produced at C and D respectively. Show that $PC = \frac{1}{2}$ perimeter of ΔPQR
4. A circle is inscribed in a quadrilateral. Prove sum of opposite sides of quadrilateral is equal.
5. ABC is a right angle is a triangle with $BC = 12\text{cm}$ and $AB = 16\text{cm}$. A circle with the centre O and radius r cm is inscribed in the triangle. Find r

3 Marks Each

6. Tangents TP and TQ are drawn to a circle with centre C from an external point A. Prove angle PTQ is twice angle CPQ
7. Prove that the intercept of a tangent between two parallel tangents to a circle subtends a right angle the centre of the circle.

6 Marks Each

8. The radius of the in circle of a triangle of a 4 cm and the segments into which one side is divided by the point of contact are 6cm and 8cm. Determine the other two sides of the triangle.

Paper by Dev Anoop (Bathinda)

Paper prepared by

Dev Anoop

Teacher St. Josephs Convent Sec. School

Bathinda (Punjab)

Email add devanoop@devanoop.com

