

CHAPTER-10 | Circles

QUIZ-01

1. A line that intersects a circle at two points is called a :

- A. Tangent B. Radius
C. Secant D. Chord (C)

Explanation: A line intersecting a circle at two points is defined as a secant.

2. How many tangents can a circle have at a point lying inside it?

- A. 0 B. 1
C. 2 D. Infinite (A)

Explanation: It is not possible to draw any tangent to a circle through a point inside it.

3. The tangent to a circle is perpendicular to the:

- A. Diameter B. Chord
C. Radius through the point of contact
D. Secant (C)

Explanation: The tangent at any point of a circle is perpendicular to the radius through the point of contact.

4. If PQ is a tangent to a circle at point P, and O is the center, then the angle between OP and PQ is :

- A. 45 degrees B. 90 degrees
C. 60 degrees D. 180 degrees (B)

Explanation: The radius is perpendicular to the tangent at the point of contact, forming a 90-degree angle.

5. The length of tangents drawn from an external point to a circle are :

- A. Unequal B. Equal
C. Parallel D. Perpendicular (B)

Explanation: The lengths of tangents drawn from an external point to a circle are equal.

6. A circle can have how many maximum parallel tangents?

- A. 1 B. 2
C. 3 D. Infinite (B)

Explanation: There cannot be more than two tangents parallel to a given secant.

7. The common point of a tangent and the circle is called the :

- A. Center
B. Point of intersection
C. Point of contact
D. End point (C)

Explanation: The common point of the tangent and the circle is the point of contact.

8. In a given figure, the line PQ is a :

- A. Secant B. Tangent
C. Chord D. Diameter (B)

Explanation: In the figure, the line PQ touches the circle at only one point, which is the definition of a tangent.

9. The word 'tangent' originated from which language?

- A. Greek B. Latin
C. English D. French (B)

Explanation: The word 'tangent' comes from the Latin word.

10. In concentric circles, the chord of the larger circle which touches the smaller circle is bisected at the:

- A. Center of the circle B. Point of contact
C. End of the chord
D. Any point on the chord (B)

Explanation: The chord of the larger circle, which touches the smaller circle, is bisected at the point of contact.