

CHAPTER-10 | CIRCLES

QUIZ
PART-01

1. A circle has how many tangents?

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

Explanation: A circle has an infinite number of tangents at various points.

2. A circle can have _____ parallel tangents at a single time.

- A. One
- B. Two
- C. Three
- D. Four (B)

Explanation: A circle can have exactly two parallel tangents at any given time, one on each side.

3. The point where the tangent touches the circle is called:

- A. Point of intersection
- B. Point of contact
- C. Point of elevation
- D. Center of the circle (B)

Explanation: The point where the tangent touches the circle is called the point of contact.

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

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

Explanation: A secant intersects the circle at two points.

5. A line that touches the circle at only one point is called:

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

Explanation: A tangent touches the circle at only one point.

6. The tangent to a circle is always:

- A. Parallel to the radius at the point of contact
- B. Perpendicular to the radius at the point of contact
- C. Parallel to the line joining the center to the point of contact
- D. None of the above (B)

Explanation: A tangent is always perpendicular to the radius at the point of contact.

7. A circle and a line can have:

- A. No intersection
- B. One point of intersection
- C. Two points of intersection
- D. All of the above (D)

Explanation: A circle and a line can have no intersection, one common point (tangent), or two common points (secant).

8. The distance between the center of the circle and the tangent is equal to:

- A. The radius of the circle
- B. Twice the radius of the circle
- C. Zero
- D. None of these (A)

Explanation: The distance from the center of the circle to the tangent is always equal to the radius.

9. At any point on a circle, the number of tangents that can be drawn is:

- A. One
- B. Two
- C. Infinite
- D. Zero (A)

Explanation: At any point on a circle, only one tangent can be drawn.

10. The tangent to a circle can be viewed as:

- A. A special case of a secant
- B. A radius
- C. A chord
- D. None of these (A)

Explanation: A tangent can be considered a special case of a secant where the two endpoints of the corresponding chord coincide.