

MCQ Questions for Class 10 Maths Chapter 10 Circles

Question 1: A tangent to a circle is drawn from an external point. The tangent segment is:

Options:

- (A). Equal to the diameter
 - (B). Equal to the radius
 - (C). Perpendicular to the radius at the point of contact
 - (D). Parallel to the radius
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Question 2: The number of tangents that can be drawn to a circle from a point outside the circle is:

Options:

- (A). One
 - (B). Two
 - (C). Three
 - (D). Infinite
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Question 3: If a tangent touches a circle at point P, then the radius through P is:

Options:

- (A). Parallel to tangent
 - (B). Equal to tangent
 - (C). Perpendicular to tangent
 - (D). Inclined at 45°
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Question 4: The line which cuts a circle at two distinct points is called:

Options:

- (A). Radius
 - (B). Tangent
 - (C). Chord
 - (D). Secant
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Question 5: The common point of a tangent and a circle is known as:

Options:

- (A). Centre
 - (B). Midpoint
 - (C). Point of contact
 - (D). Radius
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Question 6: The radius of a circle is 9 cm. Its diameter is:

Options:

- (A). 9 cm
 - (B). 12 cm
 - (C). 18 cm
 - (D). 27 cm
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Question 7: The tangent to a circle intersects the circle at:

Options:

- (A). One point
 - (B). Two points
 - (C). Three points
 - (D). No point
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Question 8: Tangents drawn from an external point to a circle are:

Options:

- (A). Unequal
 - (B). Equal
 - (C). Parallel
 - (D). Perpendicular
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Question 9: The distance from the centre of a circle to the tangent is always equal to:

Options:

- (A). Diameter
 - (B). Chord
 - (C). Radius
 - (D). Circumference
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Question 10: A chord passing through the centre of a circle is called:

Options:

- (A). Radius
 - (B). Tangent
 - (C). Diameter
 - (D). Secant
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Question 11: The angle between the tangent and radius at the point of contact is:

Options:

- (A). 30°
 - (B). 45°
 - (C). 60°
 - (D). 90°
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Question 12: A circle can have how many tangents parallel to a given line?

Options:

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

Question 13: The centre of a circle lies on the:

Options:

- (A). Tangent
 - (B). Radius
 - (C). Diameter
 - (D). Perpendicular bisector of a chord
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Question 14: If the diameter of a circle is 16 cm, then its radius is:

Options:

- (A). 4 cm
 - (B). 6 cm
 - (C). 8 cm
 - (D). 10 cm
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Question 15: A tangent is perpendicular to the:

Options:

- (A). Diameter
 - (B). Chord through point of contact
 - (C). Radius through point of contact
 - (D). Circumference
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Question 16: The number of tangents that can be drawn at a point on the circle is:

Options:

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

Question 17: A secant intersects the circle at:

Options:

- (A). One point
 - (B). Two points
 - (C). Three points
 - (D). No point
-

Question 18: If two tangents PA and PB are drawn from an external point P, then:

Options:

- (A). $PA > PB$
 - (B). $PA < PB$
 - (C). $PA = PB$
 - (D). $PA = 2PB$
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Question 19: The diameter of a circle is twice its:

Options:

- (A). Tangent
 - (B). Radius
 - (C). Chord
 - (D). Arc
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Question 20: The shortest distance between the centre of a circle and a tangent is measured along the:

Options:

- (A). Diameter
 - (B). Radius
 - (C). Chord
 - (D). Circumference
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Question 21: The tangent to a circle is a special case of:

Options:

- (A). Chord
 - (B). Radius
 - (C). Secant
 - (D). Diameter
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Question 22: The radius drawn to the point of contact bisects the tangent.

Options:

- (A). True
 - (B). False
 - (C). Sometimes true
 - (D). Cannot be determined
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Question 23: A tangent and a circle can have at most:

Options:

- (A). One common point
 - (B). Two common points
 - (C). Three common points
 - (D). Infinite common points
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Question 24: The centre of a circle is at a distance of 5 cm from a tangent. The radius of the circle is:

Options:

- (A). 2.5 cm
 - (B). 5 cm
 - (C). 10 cm
 - (D). 15 cm
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Question 25: A line touching the circle without cutting it is called:

Options:

- (A). Radius
 - (B). Diameter
 - (C). Tangent
 - (D). Secant
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Answers

1. (C). Perpendicular to the radius at the point of contact
2. (B). Two
3. (C). Perpendicular to tangent
4. (D). Secant
5. (C). Point of contact
6. (C). 18 cm
7. (A). One point
8. (B). Equal
9. (C). Radius
10. (C). Diameter
11. (D). 90°
12. (B). Two
13. (D). Perpendicular bisector of a chord

14. (C). 8 cm
15. (C). Radius through point of contact
16. (A). One
17. (B). Two points
18. (C). $PA = PB$
19. (B). Radius
20. (B). Radius
21. (C). Secant
22. (B). False
23. (A). One common point
24. (B). 5 cm
25. (C). Tangent

