



Class 10 Mathematics | Circles

MCQ WORKSHEET • 15 questions • Choose one correct option • Suggested time: 25 minutes

1. A tangent to a circle is perpendicular to the radius at:

- A. every point on the tangent
- B. the opposite diameter endpoint
- C. the circle's centre
- D. the point of contact

2. How many tangents can be drawn from a point outside a circle?

- A. 3 B. 2 C. 1 D. 0

3. How many tangents can be drawn from a point inside a circle?

- A. 1 B. 2 C. 0 D. Infinitely many

4. PA and PB are tangents from P. If PA=9 cm, PB is:

- A. 18 cm B. 9 cm C. 3 cm D. 4.5 cm

5. A circle has radius 5 cm, and OP=13 cm. Tangent length from P is:

- A. 8 cm B. $\sqrt{194}$ cm C. 12 cm D. 18 cm

6. Two tangents from P touch at A and B. If angle APB=70°, angle AOB is:

- A. 140° B. 70° C. 110° D. 55°

7. If angle AOB=130° for contact points A,B, angle between tangents is:

- A. 50° B. 65° C. 130° D. 230°

8. A line is 7 cm from the centre of a circle of radius 7 cm. It is a:

- A. secant B. tangent
- C. non-intersecting line D. diameter

9. A line lies 4 cm from centre of a radius 6 cm circle. It intersects at:

- A. infinitely many points
- B. no points
- C. two points
- D. one point

10. A quadrilateral circumscribes a circle. If AB=5, BC=7, CD=8, then DA is:

- A. 6 B. 20 C. 4 D. 10

11. From P, tangent PT=24 cm and radius OT=7 cm. OP is:

- A. $\sqrt{527}$ cm B. 25 cm C. 17 cm D. 31 cm

12. Tangents PA and PB are drawn. OP bisects angle APB. If angle APO=25°, APB is:

- A. 100° B. 50° C. 75° D. 25°

13. A tangent at A and diameter AB form an angle of:

- A. 90° B. 60° C. 45° D. 180°

14. Two parallel tangents touch a circle of radius 4 cm. Their separation is:

- A. 2 cm B. 16 cm C. 8 cm D. 4 cm

15. A circle touches sides AB, BC, CA at D,E,F. If AD=4 and BD=6, AF is:

- A. 6 B. 2 C. 10 D. 4

ANSWER KEY — check after completing all 15 questions

1.D 2.B 3.C 4.B 5.C 6.C 7.A 8.B 9.C 10.A 11.B 12.B 13.A 14.C 15.D

Original exam-style practice • Reference notes: www.physics.guru/cbse-practice-papers/ • Not an official paper