

CHAPTER-9 | : Circle

QUIZ
PART-05**1. Equal chords of a circle are always:**

- A) Equidistant from the center
- B) Perpendicular to each other
- C) Parallel to each other
- D) Unequal (A)

Explanation: Equal chords are equidistant from the center of the circle.

2. What does Theorem 9.5 state?

- A) Equal chords subtend equal angles at the center
- B) Equal chords are equidistant from the center
- C) Chords are parallel to each other
- D) Chords bisect each other (B)

Explanation: Theorem 9.5 states that equal chords are equidistant from the center.

Q3. If two chords are equidistant from the center, they are:

- A) Equal in length
- B) Unequal in length
- C) Perpendicular
- D) Parallel (A)

Explanation: Chords equidistant from the center of a circle are equal in length, as stated in Theorem 9.6.

4. In a circle, if two chords are equal, the distance from the center to these chords will be:

- A) The same
- B) Different
- C) Equal to the radius
- D) Perpendicular (A)

Explanation: Equal chords in a circle are equidistant from the center.

5. What happens if two equal chords are equidistant from the center of the circle?

- A) They are parallel
- B) They bisect each other
- C) They are equal in length
- D) They intersect at the center (C)

Explanation: Equal chords equidistant from the center are equal in length.

6. The perpendicular from the center of the circle to a chord:

- A) Bisects the chord
- B) Does not bisect the chord
- C) Makes an acute angle with the chord
- D) Makes an obtuse angle with the chord (A)

Explanation: The perpendicular from the center bisects the chord.

7. What does Theorem 9.6 state?

- A) Chords equidistant from the center are equal in length
- B) Equal chords are equidistant from the center
- C) Chords bisect each other
- D) Chords are always perpendicular to the radius (A)

Explanation: Theorem 9.6 states that chords equidistant from the center are equal in length.

8. If $CD = 8$ cm, then the length of AB is:

- A) 8 cm
- B) 5 cm
- C) 4 cm
- D) 2 cm (A)

Explanation: By the theorem, if $CD = 8$ cm, AB must also be 8 cm.

9. Which statement is true about two equal chords in a circle?

- A) They are always perpendicular to each other
- B) They are equidistant from the center
- C) They do not meet at the center
- D) They are of unequal length (B)

Explanation: Equal chords are equidistant from the center of the circle.

10. The perpendicular drawn from the center of a circle to a chord always:

- A) Bisects the chord
- B) Divides the circle into two equal areas
- C) Is equal to the radius
- D) Forms a right angle with the chord (A)

Explanation: The perpendicular from the center always bisects the chord.