

CHAPTER-8 | : Quadrilaterals

QUIZ PART-07

1. What happens when the diagonals of a parallelogram are equal?

- A) The parallelogram is a rectangle
- B) The parallelogram is a rhombus
- C) The parallelogram is a square
- D) The parallelogram is a trapezium (A)

Explanation: A parallelogram with equal diagonals is a rectangle.

2. What is the key property of diagonals in a rhombus?

- A) They are equal
- B) They bisect each other at right angles
- C) They do not bisect each other
- D) They are parallel (B)

Explanation: In a rhombus, diagonals bisect each other at right angles.

Q3. In a rectangle, the diagonals are:

- A) Unequal and perpendicular
- B) Equal and bisect each other
- C) Parallel
- D) Unequal and do not bisect (B)

Explanation: In a rectangle, the diagonals are equal and bisect each other.

4. What can be concluded if diagonals of a quadrilateral bisect each other at right angles?

- A) It's a parallelogram
- B) It's a rhombus
- C) It's a rectangle
- D) It's a square (B)

Explanation: Diagonals that bisect at right angles form a rhombus.

5. In a square, the diagonals:

- A) Are equal and bisect each other at right angles
- B) Are unequal and bisect each other
- C) Do not bisect each other
- D) Are parallel (A)

Explanation: In a square, diagonals are equal and bisect at right angles.

6. What shape is formed if the diagonals bisect each other at 90° ?

- A) Parallelogram
- B) Rhombus
- C) Rectangle
- D) Trapezium (B)

Explanation: Diagonals bisecting at 90° form a rhombus.

7. What type of quadrilateral is formed by equal diagonals that bisect each other?

- A) Rectangle
- B) Parallelogram
- C) Square
- D) Rhombus (A)

Explanation: A quadrilateral with equal diagonals that bisect each other is a rectangle.

8. If a quadrilateral has opposite sides parallel and equal, it is:

- A) A square
- B) A rhombus
- C) A rectangle
- D) A parallelogram (D)

Explanation: Opposite sides parallel and equal define a parallelogram.

9. In a rhombus, what is true about the diagonals?

- A) They are unequal and bisect each other
- B) They are equal and do not bisect each other
- C) They bisect each other but are unequal
- D) They are equal and do not intersect (C)

Explanation: In a rhombus, diagonals bisect each other and are unequal.

10. What happens in a triangle if one angle is 90° and two sides are equal?

- A) It is an isosceles right-angled triangle
- B) It is a scalene triangle
- C) It is an equilateral triangle
- D) It is a right-angled triangle (A)

Explanation: A right-angled triangle with two equal sides is an isosceles right-angled triangle.