

Chapter – 4 | Quadrilaterals

QUIZ-01

1. A rectangle is a quadrilateral in which:

- A. All sides are equal
- B. Opposite sides are parallel only
- C. All angles are 90°
- D. Diagonals are perpendicular (C)

Explanation : A rectangle can be defined as a quadrilateral whose four angles are right angles.

2. Which property is always true for a rectangle?

- A. Diagonals are perpendicular
- B. Diagonals are equal and bisect each other
- C. All sides are equal
- D. Adjacent sides are equal (B)

Explanation : The diagonals of a rectangle are equal in length and bisect each other.

3. Every square is:

- A. Only a rhombus
- B. Only a rectangle
- C. Both a rectangle and a rhombus
- D. Neither a rectangle nor a rhombus (C)

Explanation : A square has all properties of both a rectangle and a rhombus.

4. The diagonals of a square intersect at:

- A. 30°
- B. 45°
- C. 60°
- D. 90° (D)

Explanation : The diagonals of a square bisect each other at right angles.

5. The sum of all interior angles of any quadrilateral is:

- A. 180°
- B. 270°
- C. 360°
- D. 540° (C)

Explanation : A quadrilateral can be divided into two triangles, giving a total angle sum of 360° .

6. In a parallelogram:

- A. Adjacent angles are equal
- B. Opposite angles are equal
- C. All angles are 90°
- D. Diagonals are always equal (B)

Explanation : Opposite angles of a parallelogram are equal, while adjacent angles add up to 180° .

7. Which statement is true for every parallelogram?

- A. Diagonals are equal
- B. All sides are equal
- C. Diagonals bisect each other
- D. Diagonals are perpendicular (C)

Explanation : The diagonals of a parallelogram always bisect each other.

8. A rhombus is a quadrilateral in which:

- A. All angles are 90°
- B. Opposite sides are unequal
- C. All sides are equal
- D. Diagonals are equal (C)

Explanation : The defining property of a rhombus is that all four sides are equal.

9. Which special property of a rhombus is NOT true for every parallelogram?

- A. Opposite sides are parallel
- B. Opposite angles are equal
- C. Diagonals bisect each other
- D. Diagonals bisect the angles (D)

Explanation : In a rhombus, diagonals bisect the angles; this is not true for all parallelograms.

10. A trapezium is a quadrilateral having:

- A. Two pairs of parallel sides
- B. At least one pair of parallel opposite sides
- C. All sides equal
- D. All angles equal (B)

Explanation : A trapezium is defined as a quadrilateral with at least one pair of parallel opposite sides.