

## CHAPTER-7 | Area

QUIZ  
PART-22

1. A trapezium is a quadrilateral with:

- A. Two pairs of parallel sides
  - B. One pair of parallel sides
  - C. Four equal sides
  - D. No parallel sides
- (B)

**Explanation :** A trapezium has exactly one pair of opposite sides that are parallel.

2. The area of a trapezium is given by:

- A. Base  $\times$  Height
  - B.  $\frac{1}{2} \times$  (Sum of parallel sides)  $\times$  Height
  - C.  $\frac{1}{2} \times$  Base  $\times$  Height
  - D. Length  $\times$  Breadth
- (B)

**Explanation:** The area equals half the product of the height and the sum of the lengths of the parallel sides.

3. If the parallel sides of a trapezium are 5 cm and 7 cm, and its height is 4 cm, the area is:

- A. 20 cm<sup>2</sup>
  - B. 24 cm<sup>2</sup>
  - C. 28 cm<sup>2</sup>
  - D. 48 cm<sup>2</sup>
- (B)

**Explanation:** Area =  $\frac{1}{2} \times (5 + 7) \times 4 = 24$  cm<sup>2</sup>.

4. The height of a trapezium is the:

- A. Longer parallel side
  - B. Shorter parallel side
  - C. Perpendicular distance between the parallel sides
  - D. Sum of the non-parallel sides
- (C)

**Explanation:** The height is always measured at a right angle between the two parallel sides.

5. To find the area of an irregular trapezium, it can be divided into:

- A. Triangles and rectangles
  - B. Circles
  - C. Squares only
  - D. Pentagons
- (A)

**Explanation :** Breaking a trapezium into simpler shapes makes area calculation easier.

6. If the height of a trapezium is doubled while the parallel sides remain unchanged, its area becomes:

- A. Half
  - B. Double
  - C. Four times
  - D. Unchanged
- (B)

**Explanation :** The area is directly proportional to the height.

7. Which measurement is not required to calculate the area of a trapezium?

- A. Height
  - B. Length of the first parallel side
  - C. Length of the second parallel side
  - D. Length of a non-parallel side
- (D)

**Explanation :** Only the lengths of the parallel sides and the perpendicular height are needed.

8. A trapezium can be converted into simpler figures mainly to:

- A. Increase its area
  - B. Make area calculation easier
  - C. Change its perimeter
  - D. Find its angles
- (B)

**Explanation :** Dividing a trapezium into known shapes simplifies area calculation.

9. Which statement is true about every trapezium?

- A. All four sides are equal.
  - B. It has exactly one pair of parallel sides.
  - C. All angles are right angles.
  - D. Its diagonals are equal.
- (B)

**Explanation :** The defining property of a trapezium is one pair of parallel sides.

10. The area of a trapezium depends on:

- A. Perimeter only
  - B. Diagonals only
  - C. Parallel sides and perpendicular height
  - D. Non-parallel sides only
- (C)

**Explanation :** The standard area formula uses the two parallel sides and the perpendicular height.