

CHAPTER-11 | Surface Areas and Volumes

QUIZ
PART-1

1. A shape with 1 dimension has:

- A. Only one path for movement
- B. Two paths for movement
- C. Three paths for movement
- D. No movement (A)

Explanation: A 1-dimensional shape only allows movement in one path.

2. Which of these is an example of a 2-dimensional shape?

- A. Cube
- B. Circle (B)
- C. Sphere
- D. Cone

Explanation: A circle is a 2D shape, having only length and breadth.

3. Perimeter refers to:

- A. The area inside a shape
- B. The boundary length of a shape (B)
- C. Volume of the shape
- D. The height of the shape

Explanation: Perimeter is the sum of the lengths of the boundary of a shape.

4. The perimeter of a square is given by:

- A. $4 \times \text{side}$
- B. $2 \times (\text{length} + \text{breadth})$
- C. $\text{Length} \times \text{breadth}$
- D. $(\pi \times r)$ (A)

Explanation: The perimeter of a square is 4 times its side length.

5. The formula for the area of a rectangle is:

- A. side^2
- B. $l \times b$
- C. $2 \times \pi \times r$
- D. $1/2 \times b \times h$ (B)

Explanation: Area of a rectangle is length \times breadth.

6. The area of a square is:

- A. $l \times b$
- B. $\text{side} \times \text{side}$
- C. $\pi \times r^2$
- D. $2 \times (l + b)$ (B)

Explanation: Area of square = side^2 .

7. The formula for the area of a triangle is:

- A. $l \times b$
- B. $\text{side} \times \text{side}$
- C. $1/2 \times b \times h$
- D. $\pi \times r^2$ (C)

Explanation: The area of a triangle is $1/2 \times \text{base} \times \text{height}$.

8. The circumference of a circle is given by:

- A. $2\pi r$
- B. πr^2
- C. $4\pi r$
- D. $2l + 2b$ (A)

Explanation: Circumference = $2\pi r$, where r is the radius.

9. A shape with 3 dimensions is called:

- A. A polygon
- B. A 2D shape
- C. A 3D figure (C)
- D. A square

Explanation: A 3D shape has length, breadth, and height.

10. The wire bent into a circle of radius 28 cm is then bent into a square. The side of the square will be:

- A. 44 cm
- B. 40 cm
- C. 30 cm
- D. 88 cm (A)

Explanation: The perimeter of the circle is equal to the perimeter of the square. Using the formula for circumference, the side of the square is 44 cm.