



Introduction of Perimeter and Area

Understanding: Introduction of Perimeter and Area

- Perimeter is the total length of the boundary of a closed figure.
- Area is the surface covered by the figure.
- Perimeter is measured in cm, m, km, etc.
- Area is measured in square units like cm^2 , m^2 , etc.

Important Points

- Perimeter is a length, so we add all sides
- Area is the amount of space inside a shape
- Different shapes have different formulas for perimeter and area
- Used in real life for fencing, tiling, gardening, painting, etc.

Examples with Solutions

Example: Find the perimeter of a rectangle with length 8 m and breadth 4 m

$$\text{Perimeter} = 2 \times (\text{length} + \text{breadth}) = 2 \times (8 + 4) = 2 \times 12 = 24 \text{ m}$$

$$\text{Perimeter} = 24 \text{ m}$$

Example: Find the area of a square of side 5 cm

$$\text{Area} = \text{side} \times \text{side} = 5 \times 5 = 25 \text{ cm}^2$$

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Example: A triangle has sides 3 cm, 4 cm, and 5 cm. Find the perimeter

$$\text{Perimeter} = 3 + 4 + 5 = 12 \text{ cm}$$

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Example: Find the area of a rectangle of length 6 m and breadth 3 m

$$\text{Area} = \text{length} \times \text{breadth} = 6 \times 3 = 18 \text{ m}^2$$

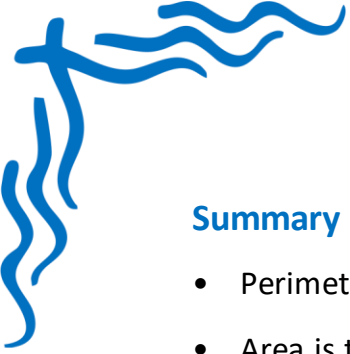
$$\text{Area} = 18 \text{ m}^2$$

Example: Find the perimeter and area of a square of side 9 m

$$\text{Perimeter} = 4 \times \text{side} = 4 \times 9 = 36 \text{ m}$$

$$\text{Area} = \text{side} \times \text{side} = 9 \times 9 = 81 \text{ m}^2$$

$$\text{Perimeter} = 36 \text{ m}, \text{Area} = 81 \text{ m}^2$$



Summary Points

- Perimeter is the distance around a figure.
- Area is the region covered by the figure.
- Perimeter is measured in regular units (cm, m).
- Area is measured in square units (cm^2 , m^2).
- Knowing both helps in real-world problems like fencing, flooring, and planning spaces.