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

Perimeter = 2 × (length + breadth) = 2 × (8 + 4) = 2 × 12 = 24 m

Perimeter = 24 m

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

Area = side × side = 5 × 5 = 25 cm^2

Area = 25 cm^2

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

Perimeter = 3 + 4 + 5 = 12 cm

Perimeter = 12 cm

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

Area = length × breadth = 6 × 3 = 18 m^2

Area = 18 m^2

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

Perimeter = 4 × side = 4 × 9 = 36 m

Area = side × side = 9 × 9 = 81 m^2

Perimeter = 36 m, Area = 81 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.