

Introduction to Perimeter and Area

Perimeter and Area are important concepts in geometry that help in measuring boundaries and surfaces of different shapes.

• Perimeter

Perimeter is the total length of the boundary of a closed figure.

- **Perimeter of a Rectangle** = $2 \times (\text{Length} + \text{Breadth})$
- **Perimeter of a Square** = $4 \times \text{Side}$
- **Perimeter of an Equilateral Triangle** = $3 \times \text{Side}$
- **Perimeter of a Regular Polygon** = $\text{Number of sides} \times \text{Length of one side}$

• Area

Area is the region occupied by a closed figure.

- **Area of a Rectangle** = $\text{Length} \times \text{Breadth}$
- **Area of a Square** = $\text{Side} \times \text{Side}$

Units of Measurement

- Perimeter is measured in units like cm, m, km etc.
- Area is measured in square units like cm^2 , m^2 , km^2 etc.

• Real-Life Examples

- Fencing a garden requires perimeter calculation.
- Tiling a floor requires area calculation.
- Measuring land uses area units like hectares, square meters, etc.