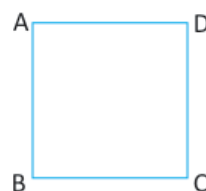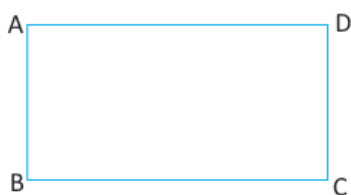## Meaning of Perimeter

Understanding Perimeter

- Perimeter is the total distance around the outside of a shape.

- It is found by adding up the lengths of all the sides of the shape.

- Perimeter is measured in units like cm, m, or mm depending on the size of the shape.

- For a rectangle or square, the perimeter can be calculated using simple formulas.

- The perimeter gives the length of the boundary of the shape.

Perimeter of square ABCD = AB + BC + CD + DA

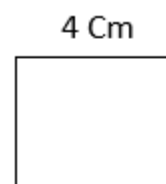Perimeter of rectangle ABCD = AB + BC + CD + DA

Key Points about Perimeter

- Perimeter is for 2D shapes only

- For regular shapes, all sides are equal in length

- For irregular shapes, add up the lengths of each side

- The perimeter helps in measuring fences, borders, and the boundary of any closed shape
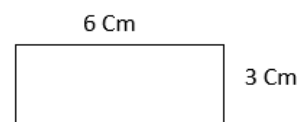
Mixed Examples with Solutions

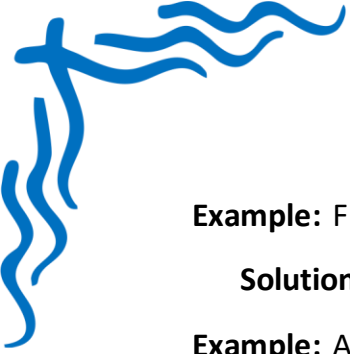**Example:** Find the perimeter of a square with side length 4 cm

Solution: Perimeter = 4 × side = 4 × 4 = 16 cm

Example: Find the perimeter of a rectangle with length 6 cm and width 3 cm

Solution: Perimeter = 2 × (length + width)

= 2 × (6 + 3) = 2 × 9 = 18 cm

Example: Find the perimeter of a triangle with sides 5 cm, 6 cm, and 7 cm

   Solution: Perimeter = 5 + 6 + 7 = 18 cm

Example: A garden is 10 m long and 5 m wide. What is the perimeter of the garden?

   Solution: Perimeter = 2 × (length + width) = 2 × (10 + 5) = 2 × 15 = 30 m

Example: Find the perimeter of a regular pentagon with each side measuring 8 cm

   Solution: Perimeter = 5 × side = 5 × 8 = 40 cm

Summary Points

- Perimeter is the total distance around a shape.
- It is calculated by adding the lengths of all sides.
- For squares and rectangles, special formulas are used.
- The perimeter is important in finding the boundary of any shape.
- Practice helps in quickly calculating perimeters of different shapes.