

## ◆ 1. Rectangle

### Perimeter Formula:

$$P = 2(l + w)$$

Where:

- $l$  = length
- $w$  = width

### Area Formula:

$$A = l \times w$$

#### ✓ Example:

A rectangle has length 8 cm and width 5 cm.

- Perimeter:  $2(8 + 5) = 2 \times 13 = 26$  cm
- Area:  $8 \times 5 = 40$  cm<sup>2</sup>

## ▲ 2. Triangle

### Area Formula:

$$A = \frac{1}{2} \times \text{base} \times \text{height}$$

### Perimeter:

Add the lengths of the three sides.

#### ✓ Example:

A triangle has base 6 cm, height 4 cm, and other two sides are 5 cm and 7 cm.

- Area:  $\frac{1}{2} \times 6 \times 4 = 12$  cm<sup>2</sup>
- Perimeter:  $6 + 5 + 7 = 18$  cm



### 3. Parallelogram

#### Area Formula:

$$A = \text{base} \times \text{height}$$

Note: Height is the perpendicular height, *not* the slanted side.

#### Perimeter:

$$P = 2(a + b)$$

Where:

- $a$  and  $b$  are the lengths of adjacent sides.



#### Example:

A parallelogram has base 10 cm, height 6 cm, and the other side is 4 cm.

- Area:  $10 \times 6 = 60 \text{ cm}^2$
- Perimeter:  $2(10 + 4) = 28 \text{ cm}$



### 4. Trapezium (Trapezoid)

#### Area Formula:

$$A = \frac{1}{2}(a + b)h$$

Where:

- $a$  and  $b$  are the lengths of the two parallel sides
- $h$  is the height (perpendicular distance between  $a$  and  $b$ )

#### Perimeter:

Add the lengths of all 4 sides.



#### Example:

A trapezium has parallel sides of 8 cm and 5 cm, height 4 cm, and other two sides are 3 cm and 4 cm.

- Area:  $\frac{1}{2}(8 + 5) \times 4 = \frac{13 \times 4}{2} = 26 \text{ cm}^2$
- Perimeter:  $8 + 5 + 3 + 4 = 20 \text{ cm}$

