



Area

Area is the amount of space inside a shape.

For example, if you want to find the area of your bedroom, you're measuring how much space is inside the room.

Perimeter

Perimeter is the distance around the outside of a shape.

For example, if you want to know how much fencing you need to enclose your garden, you're measuring the perimeter of the garden.

Square



$$\text{Area} = \text{Side} \times \text{Side}$$
$$\text{Perimeter} = 4 \times \text{Side}$$

Rectangle



$$\text{Area} = \text{Length} \times \text{Width}$$
$$\text{Perimeter} = 2 \times (\text{Length} + \text{Width})$$

Circle



$$\text{Area} = \pi \times \text{Radius}^2$$
$$\text{Perimeter} = 2 \times \pi \times \text{Radius}$$

Triangle



$$\text{Area} = \frac{1}{2} \times \text{Base} \times \text{Height}$$
$$\text{Perimeter} = \text{Side1} + \text{Side2} + \text{Side3}$$

Parallelogram



$$\text{Area} = \text{Base} \times \text{Height}$$
$$\text{Perimeter} = 2 \times (\text{Base} + \text{Side})$$

Trapezoid



$$\text{Area} =$$
$$\frac{1}{2} \times (\text{Sum of parallel sides}) \times \text{Height}$$
$$\text{Perimeter} = \text{Sum of all four sides}$$