

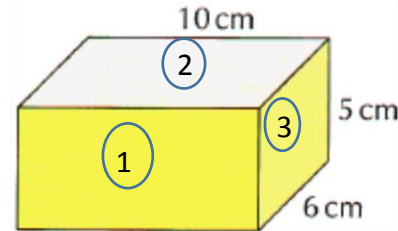
Area

Surface Area

To find the surface area of a 3D shape find the **area** of each face then add them together.

Example:

Find the surface area of this cuboid.



Face 1: $10 \times 5 = 50 \text{ cm}^2$

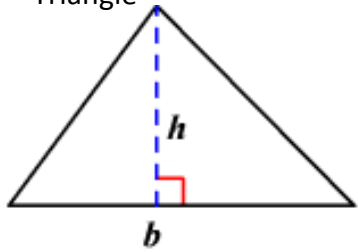
Face 2: $10 \times 6 = 60 \text{ cm}^2$

Face 3: $5 \times 6 = 30 \text{ cm}^2$

There are two of each face:

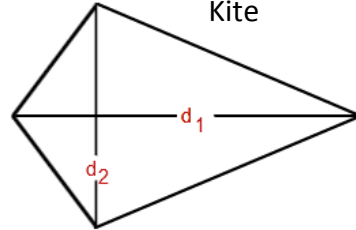
$$50 + 50 + 60 + 60 + 30 + 30 = 280 \text{ cm}^2$$

Triangle



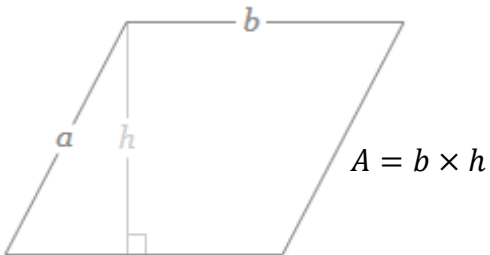
$$A = \frac{1}{2} \times b \times h$$

Kite



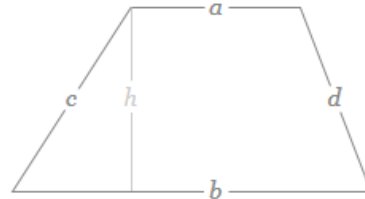
$$A = \frac{1}{2} \times d_1 \times d_2$$

Parallelogram



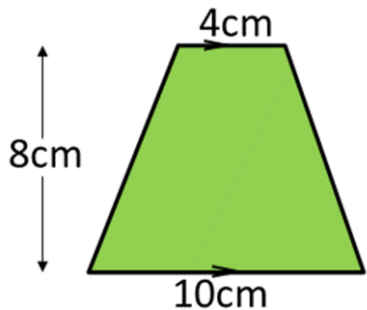
$$A = b \times h$$

Trapezium



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

Find the area of this trapezium



Write down formula and fill in information:

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

$$A = \frac{1}{2} \times (4 + 10) \times 8$$

$$A = \frac{1}{2} \times 14 \times 8$$

$$A = 56 \text{ cm}^2$$