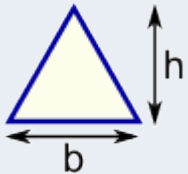


Areas of shapes

What is an area?

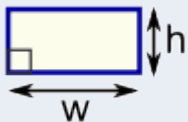
An area is the amount of surface the 2D shape covers. It's measured in square units, for example mm^2 , cm^2 , m^2 , etc.



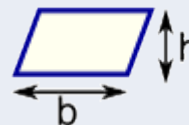
Triangle
Area = $\frac{1}{2}b \times h$
b = base
h = vertical height



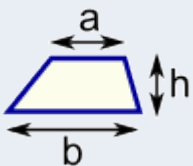
Square
Area = a^2
a = length of side



Rectangle
Area = $w \times h$
w = width
h = height



Parallelogram
Area = $b \times h$
b = base
h = vertical height



Trapezium
Area = $\frac{1}{2}(a+b) \times h$
h = vertical height



Circle
Area = πr^2
Circumference = $2\pi r$
r = radius

Compound shapes

This is a compound shape. To find the area you have to split the shape into two rectangles. To work this out you will need to know the formula for the area of a rectangle.

Area of a rectangle = width x height.

So using this example it would be

$$6\text{cm} \times 2\text{cm} = 12\text{cm}^2$$

$$9\text{cm} \times 4\text{cm} = 36\text{cm}^2$$

Then you add both of them together. This gives you an area of **48cm²**.

