

Understanding and Using Area

The area is the space inside a shape. It is measured in square metres (m^2) or square millimetres (mm^2).

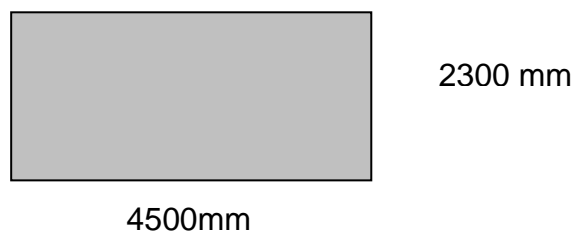
Work out the areas of the following shapes. The first one has been done for you.

Example 1

Find the area of the rectangle below in m^2 .

The area of a rectangle can be found by multiplying its length by its width.

First change its length and width into metres, and then multiply them together.

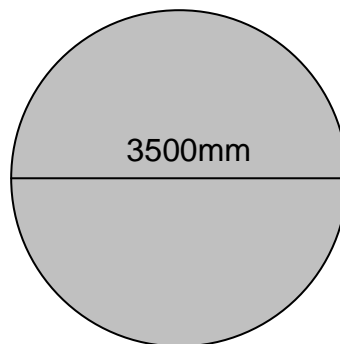


$$\begin{aligned}\text{Area} &= \text{Length} \times \text{Width} \\ &= 4.5\text{m} \times 2.3 \text{ m} \\ &= 10.35 \text{ m}^2\end{aligned}$$

Example 2

The area of a circle can be found by multiplying Π (3.142) by the radius squared.

The radius is half the diameter.



$$\Pi = 3.142$$

$$\begin{aligned}\text{Radius} &= 3500 \div 2 \\ &= 1750 \text{ mm}\end{aligned}$$

$$\begin{aligned}\text{Area} &= \Pi r^2 \\ &= \Pi \times 1.750^2 \\ &= \Pi \times 3.0625 \text{ m}^2 \\ &= 9.621 \text{ m}^2\end{aligned}$$

Practice Question 2

