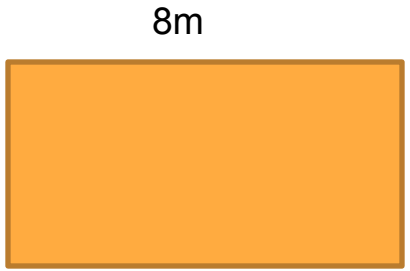
Year 4 Summer 2 Week 8 Lesson 5

Can I find the area of a rectilinear shape?

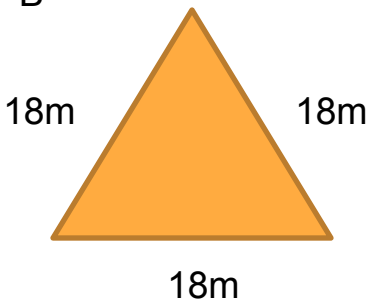
Fast Five

What are the perimeters of these shapes? All measurements in m.

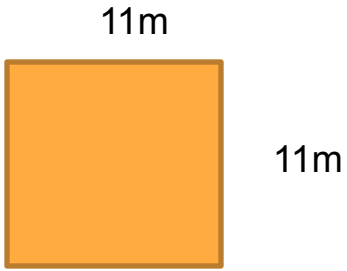
A



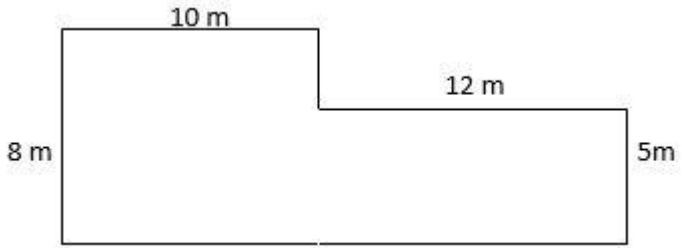
B



C



D



Fast Five Answers

A = 26m

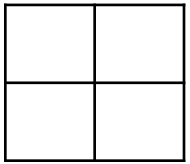
B = 54m

C = 44m

D = 60m

Can I find the area of a rectilinear shape?

Area measures the surface inside a shape.
To find the area we can often count the number of squares it covers.



Each small square has sides 1cm long.

This shape covers 4 squares.

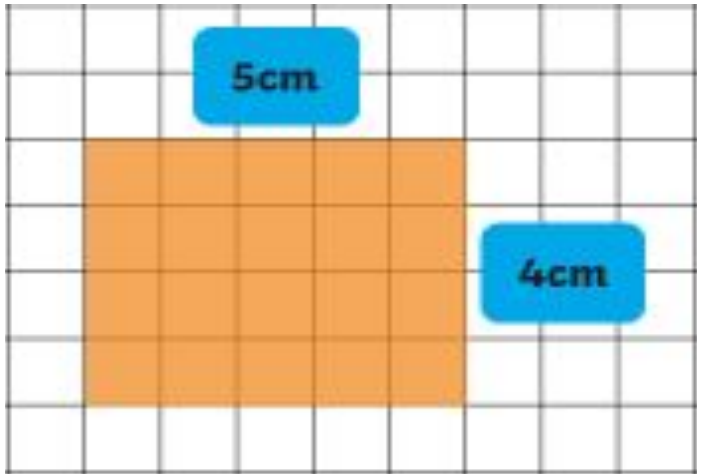
The area of this shape is 4cm².

We must always include the units² at the end to show we are measuring area.

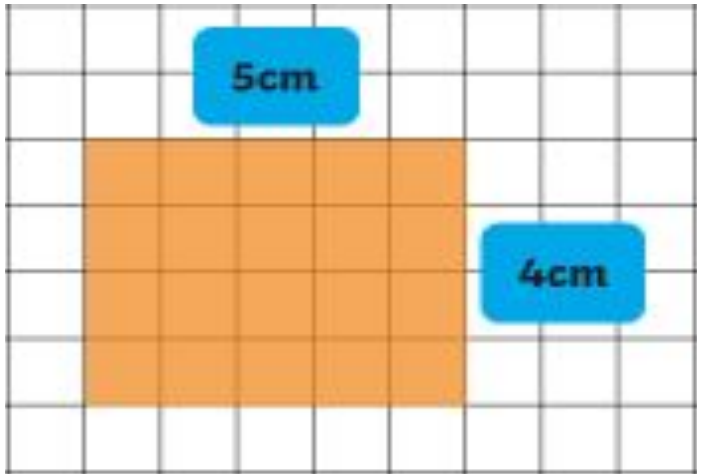
What is the area of this shape?

There are 8 squares covered so it is 8cm²

What is the area of this shape?



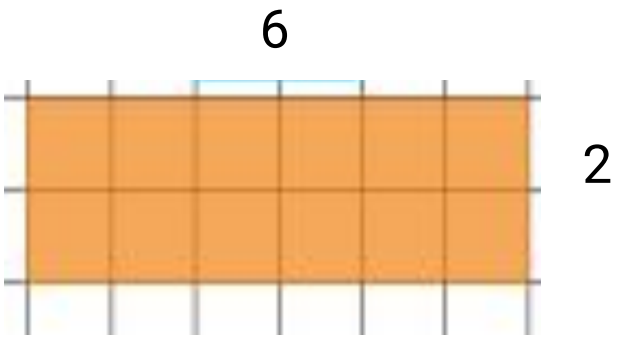
What is the area of this shape?



The shape covers 20 squares so it is 20cm²

Alternative method

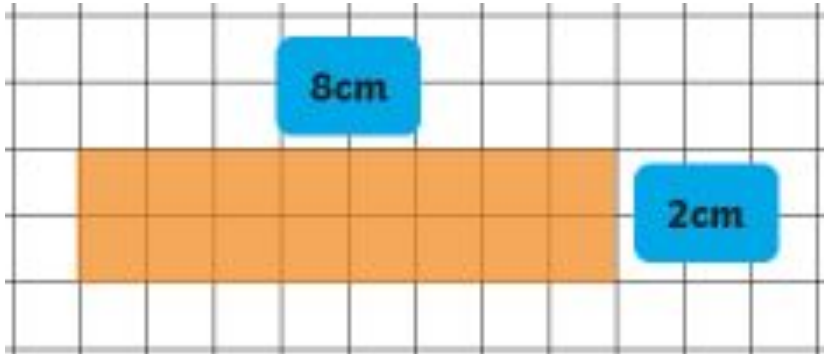
Rather than counting the individual squares (if the shape is a square or a rectangle) we can simply multiply the length by the width.



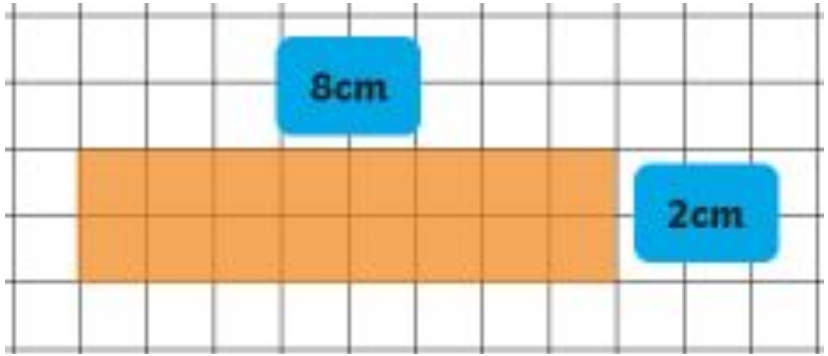
Each square is 1cm²

6cm x 2cm = 12cm²

What is the area of this shape?

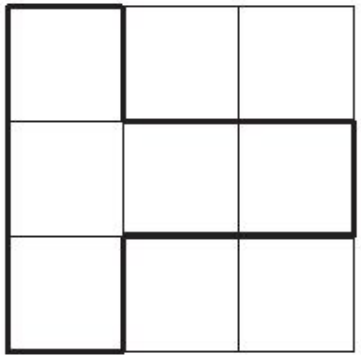


What is the area of this shape?

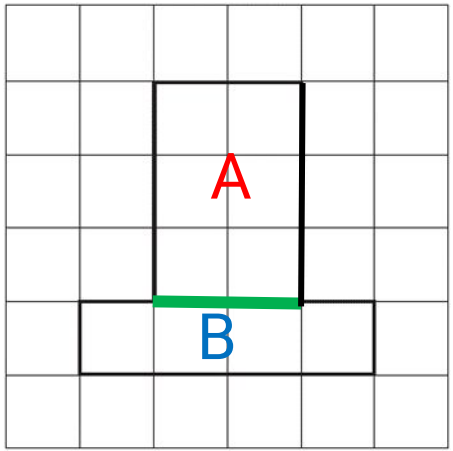


8cm x 2cm = 16cm²

Composite shapes



Each square is 1cm². This shape covers 5 squares so is 5cm²



This shape can be divided into 2 separate rectangles A and B

Area of shape A = 2cm x 3cm = $6cm^2$

Area of shape B = 4cm x 1cm = $4cm^2$

Total area = area A + area B

$6cm^2$ + $4cm^2$ = $10cm^2$