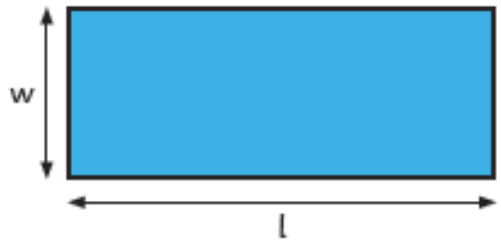
Key Vocabulary
metre
kilometre
perimeter
length
width
rectangle
rectilinear
dimensions

Measure Perimeter

Measure the perimeter of a rectangle:



Measure the length (l) and width (w).

Perimeter = l + w + l + w or (l + w) × 2

Measure the perimeter of regular shapes:

Measure the length (l) and count the number of sides (s) on the shape.

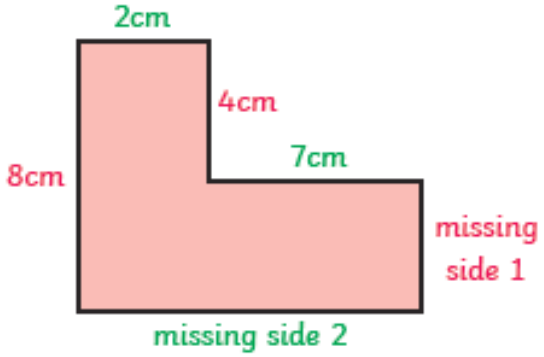
Perimeter = l × s

Measure the perimeter of irregular shapes:

Measure the length of each side and add them together.

Calculate Perimeter

Calculate the missing sides of this rectilinear shape to find the perimeter:



* *This shape is not drawn to the dimensions specified.*

Missing side 1 + 4cm = 8cm,
so missing side 1 = 4cm.

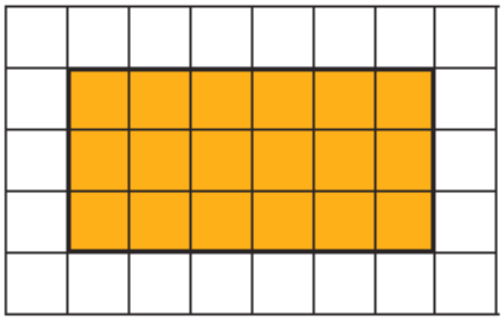
Missing side 2 = 2cm + 7cm = 9cm

Perimeter = sum of all sides =

2cm + 4cm + 7cm + 4cm + 9cm + 8cm = 34cm

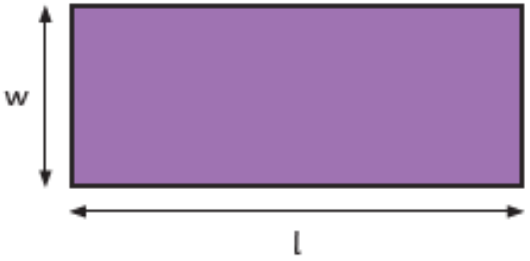
Area of Rectangles

The area of a rectangle on a grid:



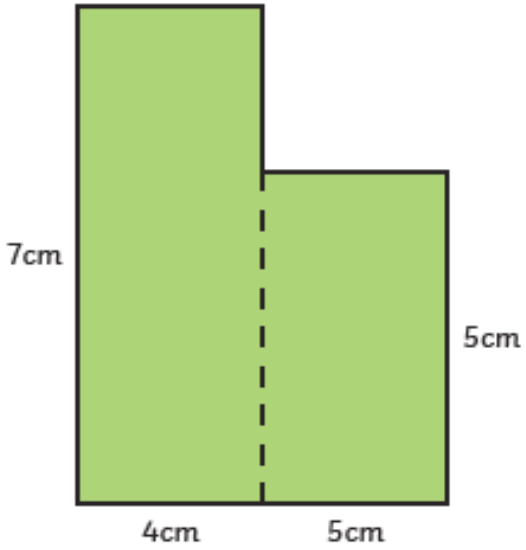
Multiply the length × width
= 6 × 3 = 18 squares.

The area of a rectangle = length (l) × width (w).



Area of Compound Shapes

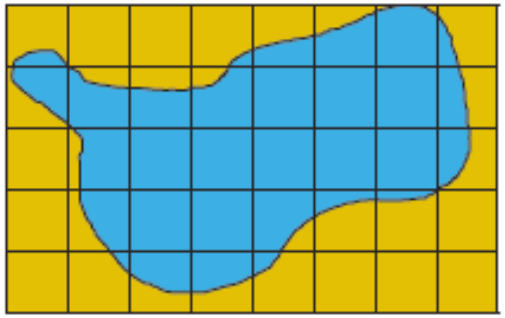
To find the area of a compound shape, divide the shape into rectangles with known dimensions:



Area = 7cm × 4cm + 5cm × 5cm
= 28cm² + 25cm²
= 53cm²

Area of Irregular Shapes

To find the area of an irregular shape, find the number of whole squares and part squares.



Whole squares = 10
Part squares = 22

Estimate of area = whole squares + half part squares

= 10cm² + 11cm² = 21cm²

*There are other ways to estimate the area of irregular shapes.

Is it possible for shapes to have the same area and perimeter?
How many ways can you draw a shape with an area of 12cm^2? What is the same and what is different about these shapes?