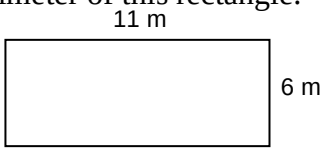
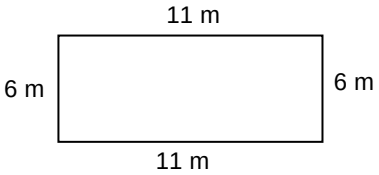
Area and Perimeter – Exemplar Solutions

Pages 3, 4

Find the perimeter of this rectangle.





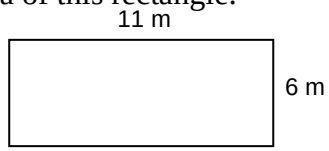
First find the length of all sides.

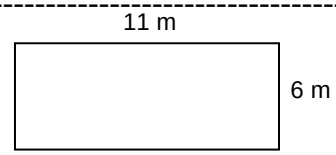
There are 3 lines of setting out.

Perimeter = sum of sides
= 11 + 6 + 11 + 6
Perimeter = 34 m

Page 8

Find the area of this rectangle.



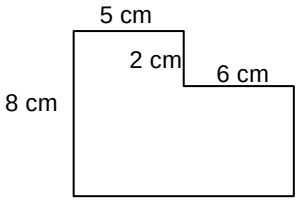


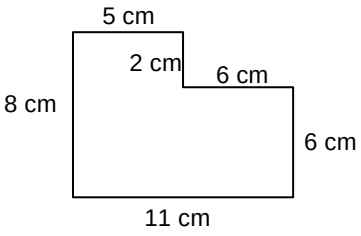
There are 3 lines of setting out.

Area = Length x Width
= 11 *x* 6
Area = 66 m^2

Pages 2,3,4

Find the perimeter of this polygon.





First find the length of all sides.

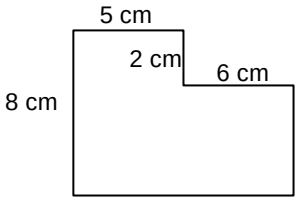
Don't split it into 2 rectangles.

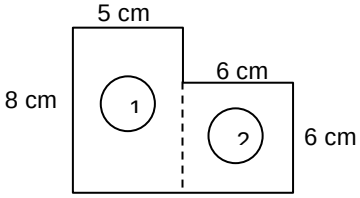
There are 3 lines of setting out.

Perimeter = sum of sides
= 5 + 2 + 6 + 6 + 11 + 8
Perimeter = 38 m

Pages 8,9

Find the area of this polygon.





First split it into 2 rectangles and find the length and width of each.

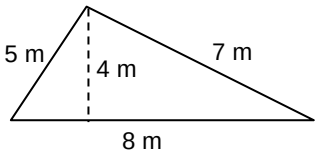
There are 3 lines of setting out for each rectangle, and 3 lines to add the areas together.

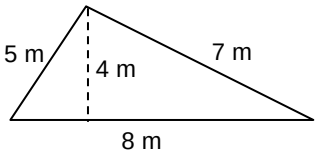
A_1 = L x W
= 8 *x* 5
= 40 m^2
A_2 = L x W
= 6 *x* 6
= 36 m^2
A = $A_1 + A_2$
= 40 + 36
A = 76 m^2

Area and Perimeter – Exemplar Solutions

Pages 9,10

Find the area of this triangle.





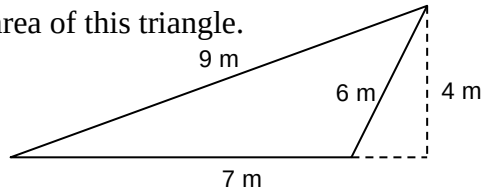
Decide which measurement is the perpendicular height.

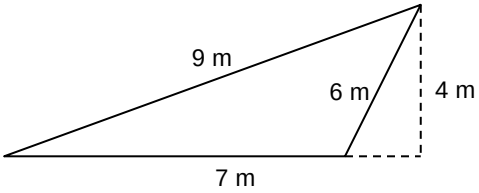
Area = Base x Perp Height ÷ 2
= 8 x 4 ÷ 2
Area = 16 m^2

There are 3 lines of setting out.

Page 9,10

Find the area of this triangle.





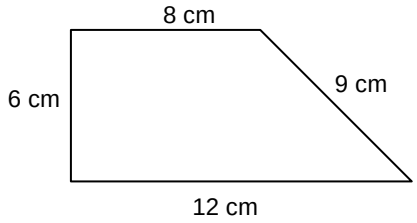
Decide which measurement is the perpendicular height.

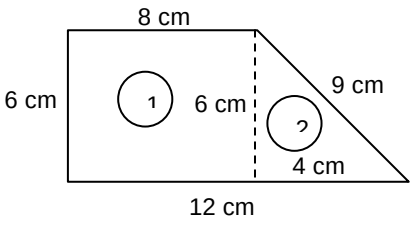
Area = Base x Perp Height ÷ 2
= 7 x 4 ÷ 2
Area = 14 m^2

There are 3 lines of setting out.

Pages 11, 12

Find the area of this polygon.





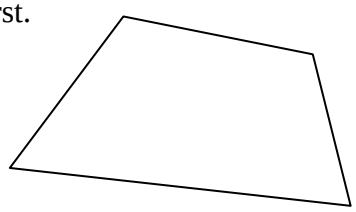
First split it into 2 known shapes and find the dimensions of each.

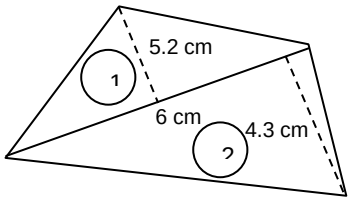
A_1 = L x W
= 8 *x* 6
= 48 cm^2
A_2 = B x PH ÷ 2
= 4 x 6 ÷ 2
= 12 cm^2
A = A_1 + A_2
= 48 + 12
A = 60 cm^2

There are 3 lines of setting out for each shape, and 3 lines to add the areas together.

Page 13

Find the area of this polygon in cm^2 by measuring first.





Split it into 2 triangles. Draw in the perp height of each. Measure the base and perp height of each.

A_1 = B x PH ÷ 2
= 6 x 5.2 ÷ 2
= 31.2 cm^2
A_2 = B x PH ÷ 2
= 6 x 4.3 ÷ 2
= 25.8 cm^2
A = A_1 + A_2
= 31.2 + 25.8
A = 57 cm^2

There are 3 lines of setting out for each shape, and 3 lines to add the areas together.