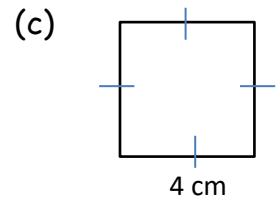
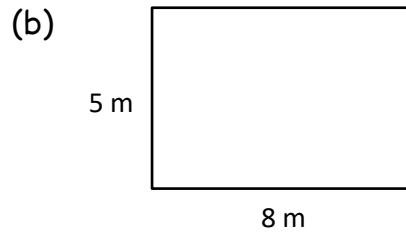
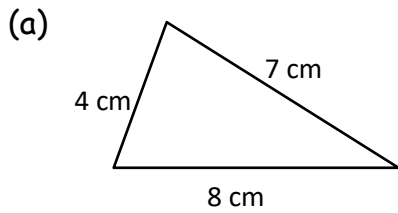


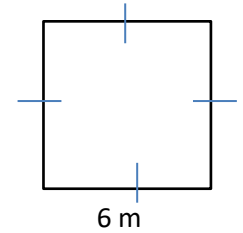
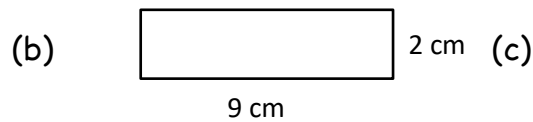
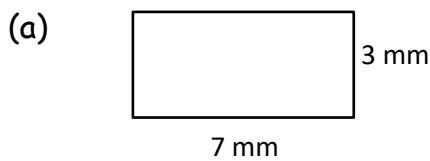
National 3 Mathematics Lifeskills: Shape, Space and Measures

Mixed revision

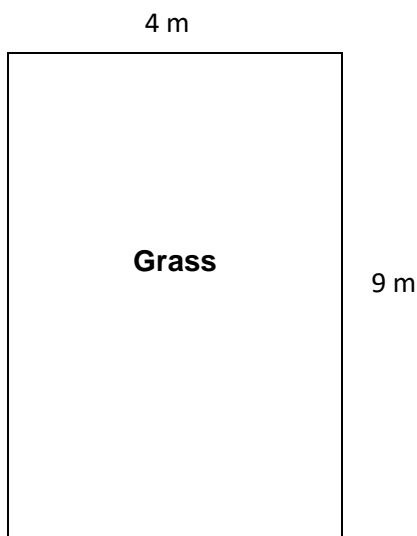
1. Work out the perimeter of:



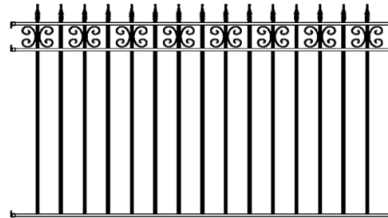
2. Work out the area of:



3. A new rectangular garden is shown below:



A fence is to be placed around the garden.

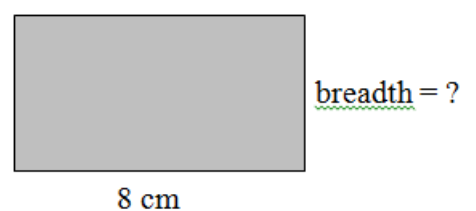


(a) Calculate the length of fencing needed.

(b) The whole garden is to be covered in grass.

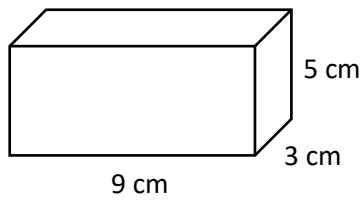
Calculate the area of the garden to be covered in grass.

4. The rectangle shown has area 56 square centimetres.
The length of the rectangle is 8 centimetres.
Work out the breadth of the rectangle.

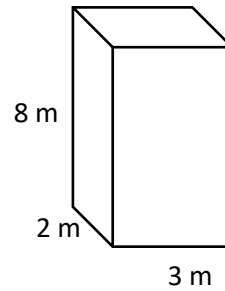


5. Work out the volume of these cuboids:

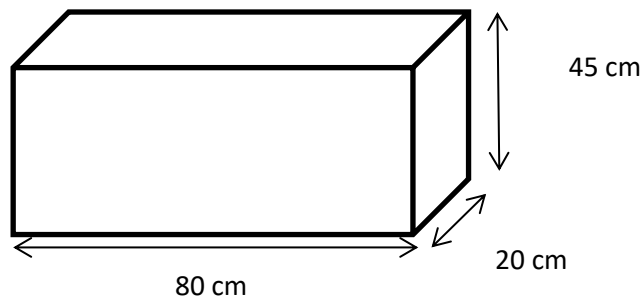
(a)



(b)



6. A fish tank is 80 cm long, 20 cm wide and 45 cm high, as shown.

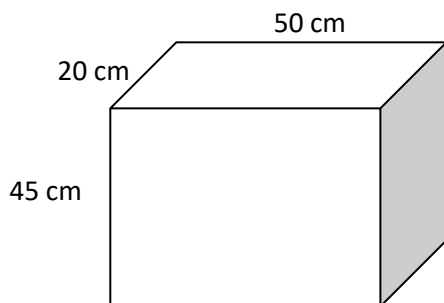


(a) What formula would you use to calculate the volume of the tank?

(b) Calculate how much water you need to fill the tank to the top.

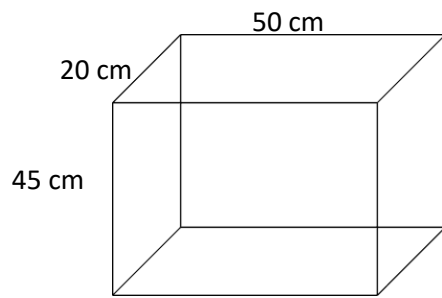
(c) Another fish tank holds twice the amount of water. How much water does this tank hold?

7. Blair makes a footstool. It is in the shape of a cuboid, 50 centimetres long, 20 centimetres broad and 45 centimetres high.



(a) Calculate the volume of Blair's footstool.

- (b) Blair fills the footstool with foam and then puts a decorative cord around **all** the edges.

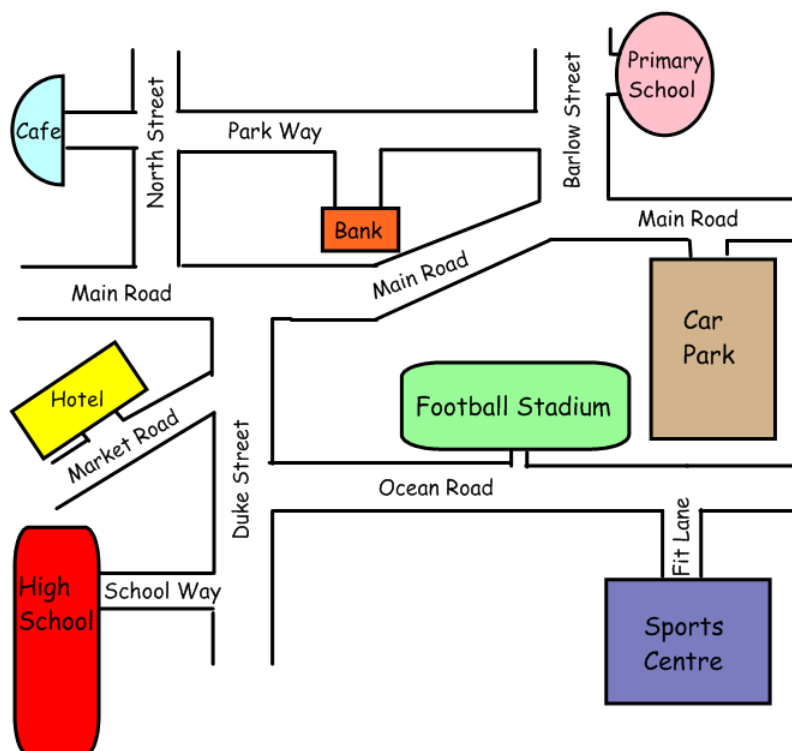


Calculate the **total length** of the decorative cord Blair needs to go around **all** the edges of the footstool.

8. You have been given the following directions to help you find your way from the Primary School to the High School.

- (a) On the map draw a line to show the route. Follow these directions:

- ◆ Come out of the Primary School onto Barlow Street
- ◆ Turn second right onto Main Road
- ◆ Turn left and go down Duke Street
- ◆ Turn second right onto School Way
- ◆ The High School is straight ahead



1 cm = 100 m

- (b) Estimate the distance you have to walk.

(c) Write down directions to get from the Sports Centre to the Cafe.

Answers

1 a) 19 cm b) 26 m c) 16 cm

2 a) 21 mm² b) 18 cm² c) 36 m²

3 a) 26 m b) 36 m²

4 7 cm

5 a) 135 cm² b) 48 m³

6 a) $V = l \times b \times h$ b) 72 000 cm³ c) 144 000 cm³

7 a) 45 000 cm³ b) 460 cm

8 a) on map