

# Measurement (part 2)



## Exercises

### Learning Skills

### Introduction:

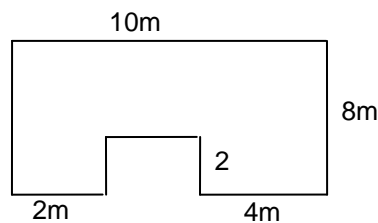
To reinforce what was learnt in [part 1](#) of this topic we have included some exercises for you to try out. Answers can be found at the end of this document. Contact one of our Maths Advisers if you have any problems.

## 1. Perimeter

1.1. Find the perimeter



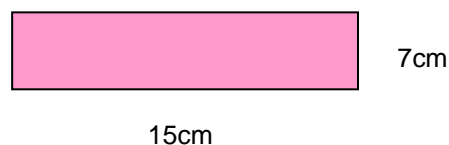
1.2. Find any missing lengths then find the perimeter of this shape.



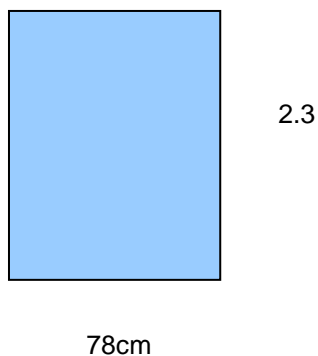
1.3. A farmer has a rectangular paddock 723m long and 452 m wide. Find the cost of fencing this paddock at \$4.20 per metre.

## 2. Area

2.1. Find the area of the rectangle.



2.2. Find the area of the rectangle – make sure the units are the same.



2.3. Find the area of a square paddock with sides 320 metres in square metres and in hectares.

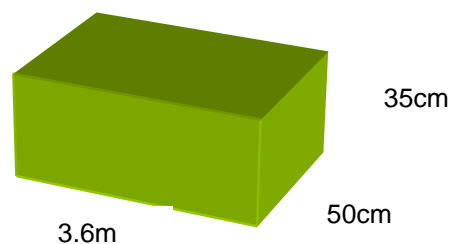
2.4. A paddock is 2.16 hectares in area. Trees to be planted in the paddock require a 6 metre by 6 metre space each. How many trees can be planted in the orchard?

2.5. How many square 10 cm by 10cm tiles would be needed to cover a rectangular area 50 cm by 90 cm?

### 3. Volume and capacity

3.1. Find the volume of a box with dimensions 2 metres by 1  $\frac{1}{5}$  metres by 2  $\frac{1}{3}$  metres.

3.2. Find the volume, first in cubic centimetres, then in cubic metres.



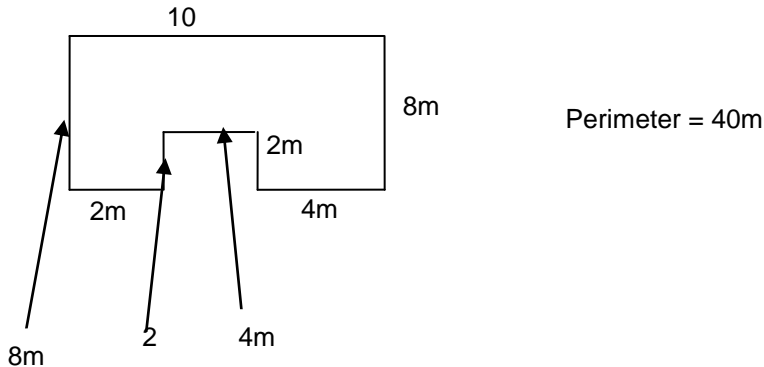
3.3. Find the volume of a small fish tank measuring 30cm by 40cm by 60cm. Find its capacity in millilitres and litres.

3.4. Find the volume of a shipping container with measurements 5.26 metres by 2.3 metres by 3 metres. Find the number of litres it would hold.

## 4. Answers

1.1. 214cm.

1.2.



1.3. Perimeter = 2 350m, cost = \$9 870.

2.1. area = 105 square centimetres.

2.2. area = 1.794 square metres or area = 17 940 square centimetres.

2.3. area = 102 400 square metres = 10.24 hectares.

2.4. paddock = 2.16 hectares = 21 600 square metres, each tree needs 36 square metres, so number of trees = 600.

2.5. area of each tile = 100 square centimetres, area to be tiled = 4 500 square centimetres, number of tiles needed = 45.

3.1. Volume = 6.9 cubic metres

3.2. Volume = 630 000 cubic centimetres, volume = 0.63 cubic metres.

3.3. Volume = 72 000 cubic centimetres, capacity = 72 000 millilitres, capacity = 72 litres.

3.4. Volume = 36.294 cubic metres, capacity = 36 294 litres.

## 5. For more information

Visit our Learning Skills website at <http://www.csu.edu.au/division/studserv/maths/index.htm>

Part 1 of this document can be found at <http://www.csu.edu.au/division/studserv/maths/teachered.htm>

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