



Centre Name

Signature

Surname

Forename

Date of Assessment

Date of Birth

Assessor use only

Total Marks	
Pass Mark	30
Pass / Did not achieve	

Ascentis Maths (QCF)

Mathematical Skills – Understanding Shape and Space Level 2 Assessment Paper Guide time: 1 hour

You must have:

A pen – black or blue ink, a protractor, a ruler and a scientific calculator

SAMPLE PAPER

Instructions

- Do not open this paper until you are told to do so
- Answer all questions in the spaces provided
- Show all your workings
- Cross through any work you do not want to be assessed
- If you need more space to complete your answer to any question, use additional sheets of paper, write your name on each sheet and attach them to this assessment paper
- Answer all questions

Information

- There are 9 tasks to be answered, carrying a total of 37 marks for the paper

Guidance

- You are advised to work through the paper steadily, dividing your time between the tasks
- Pay attention to the marks available for each question

Assessor name and signature:

IV name and signature:

Date:

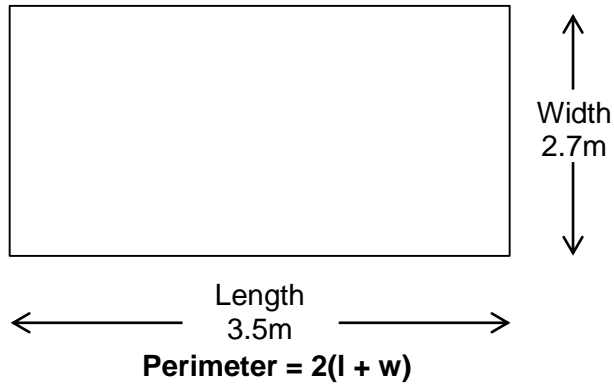
Date:

1 Using the formula given, calculate the perimeter of each shape.

(4 marks)

Show your working.

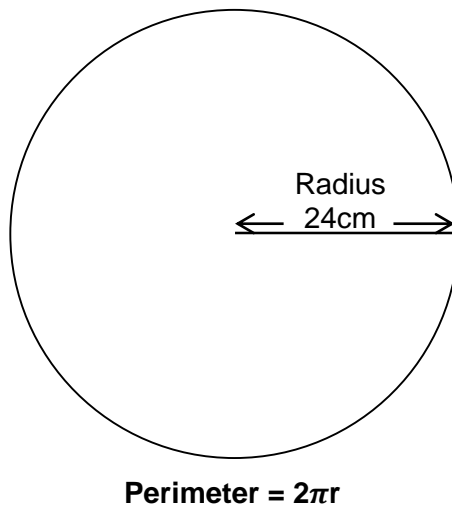
a



.....
.....

Perimeter = m

b



Give your answer to two decimal places.

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.....

Perimeter = cm

2 Select a formula below to calculate the area of each shape.

(5 marks)

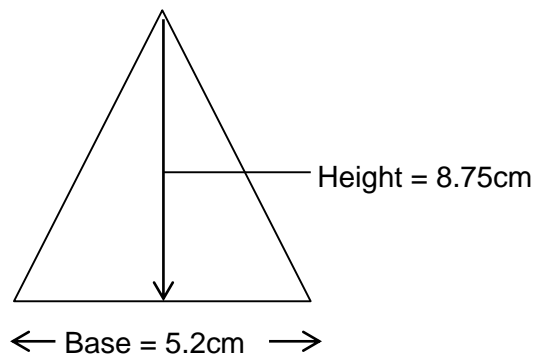
Area of rectangle = $l \times w$ where l = length and w = width.

Area of a triangle = $\frac{1}{2}$ base \times height.

Area of a circle = πr^2 .

Show your working and give all your answers to two decimal places.

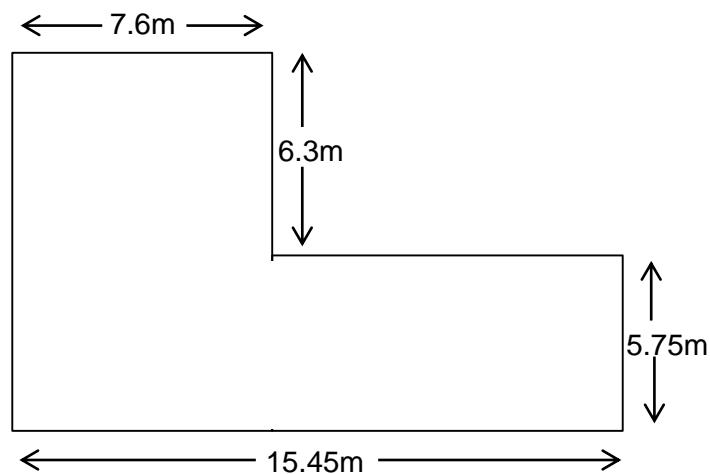
a



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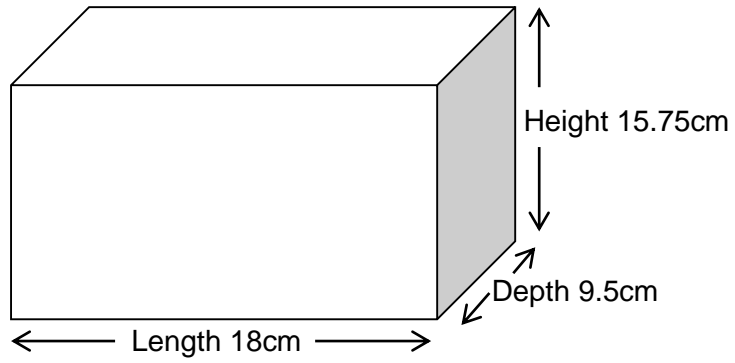
Area =

b



.....
.....

Area =



3 Find the volume of the cuboid using the formula:

Volume = length x depth x height.

(3 marks)

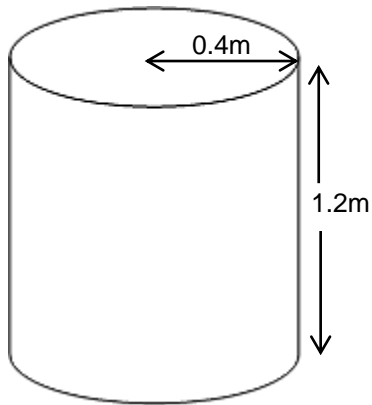
Show all your working.

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Volume =



The height of this cylinder is 1.2m
The radius (r) is 0.4m

4 Find the volume (V) of the cylinder using the formula:

$$V = \pi r^2 h$$

(4 marks)

Show all your working and round your answer appropriately.

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Answer

A scale drawing of a rectangular garden has a length of 12.5cm and a width of 15cm.

5 If the scale used was 1:150, what is the actual length and width of the garden?

(4 marks)

Show all your working.

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.....

Actual length to nearest whole metre.

Actual depth to nearest whole metre.

A road map uses the scale 1 inch represents 30 miles.

6 If the route is 4.5 inches on the map, what is the actual distance?

(2 marks)

Show your working.

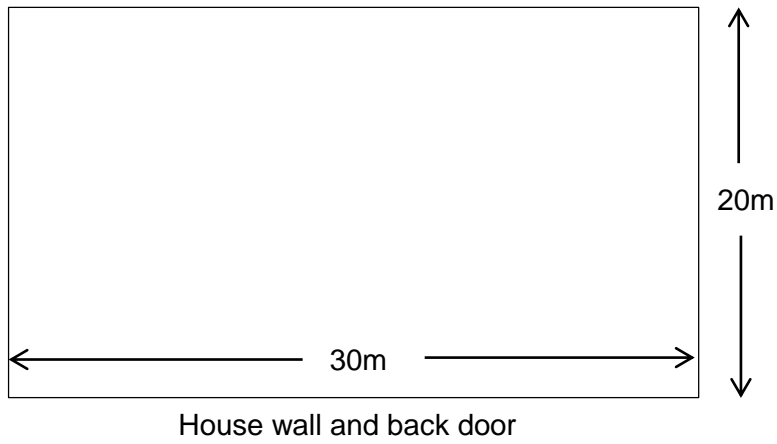
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Answer

A rectangular garden measures 30 metres by 20 metres. A sketch is shown below.



The garden includes:

- a patio along the house wall which measures 30m by 3m
- a shed with a base of 3m by 2m

You are going to draw a scale drawing of the garden.

7 a State the scale you will use. (1 mark)

Answer

b What will be the actual measurements of the patio on your plan?

(3 marks)

Show your working.

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Answer

c What will be the actual measurements of the shed on your plan?

(2 marks)

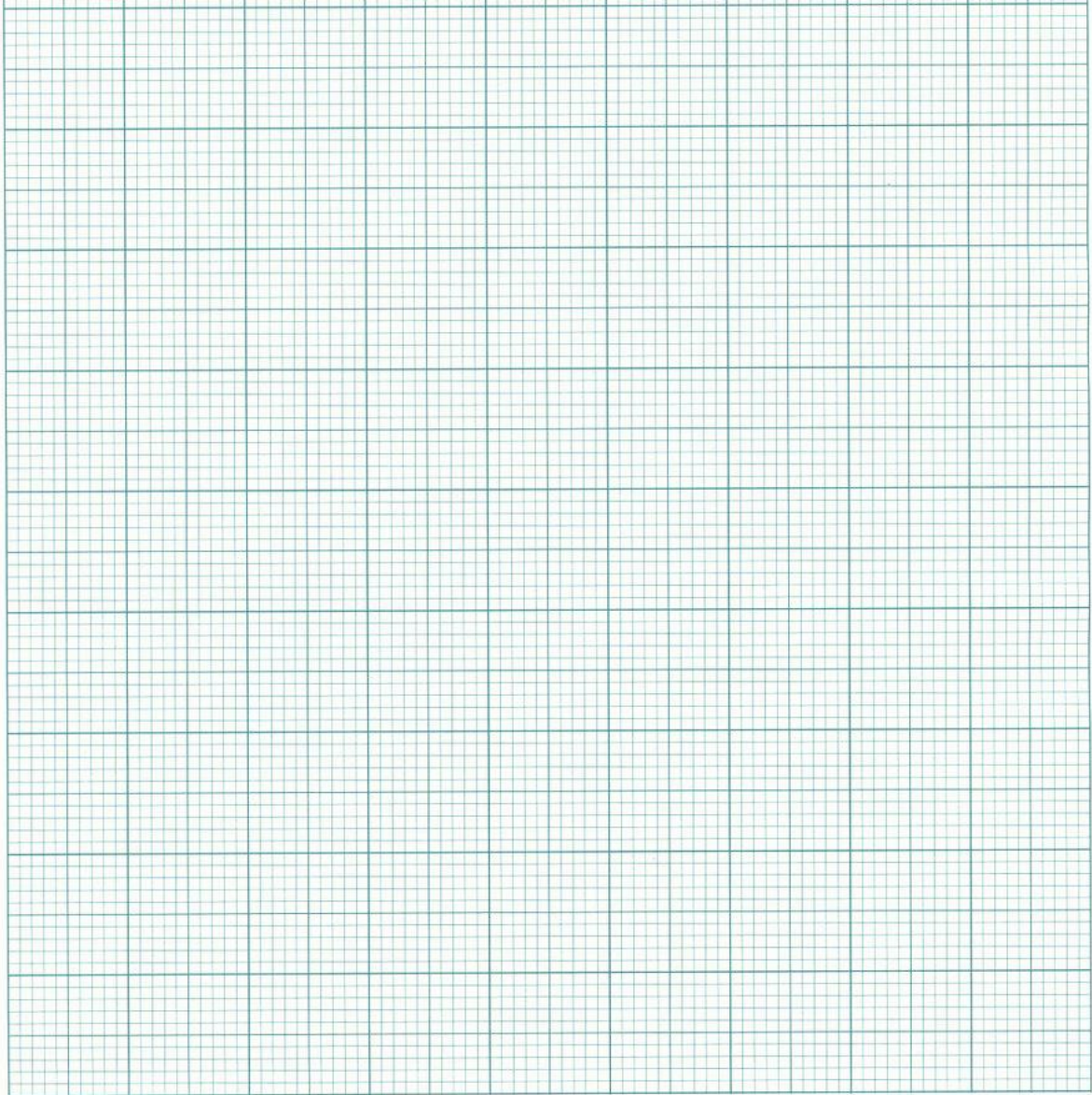
Show your working.

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Answer

d Draw the scale drawing of the garden with patio and shed on the graph paper.

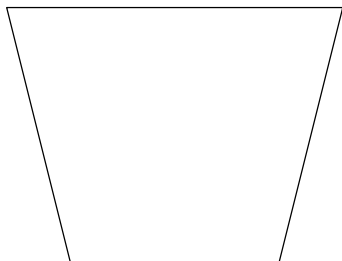
(3 marks)



8 For each of the shapes below, say if it has any parallel lines **and if it does identify them using >> on the lines.**

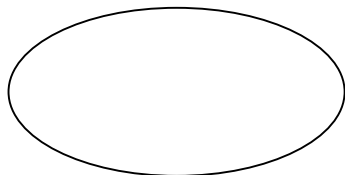
(4 marks)

a



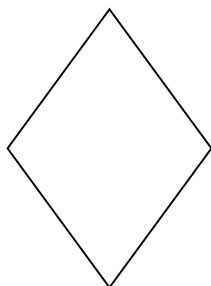
Does it have parallel lines?

b



Does it have parallel lines?

c



Does it have parallel lines?

You need to measure the length of guttering at the front of your house but don't want to go up a ladder.

9 Explain what you could measure that is parallel to the guttering to get this length. (2 marks)

You can use a sketch if this helps.

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END OF ASSESSMENT

Total marks



Ofqual Accreditation Number:

Award in Mathematical Skills – 601/0742/X
Certificate in Mathematical Skills – 601/1035/1