

## Topic Test 1 (20 minutes)

### Volume - Foundation

- 1 Which of the following is **not** a measure of volume?  
Circle your answer.

[1 mark]

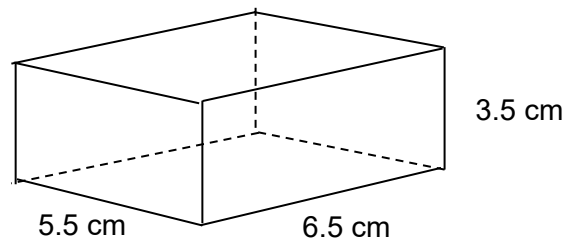
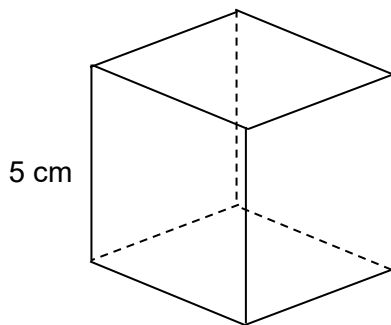
litre

cubic centimetre

metre

mm<sup>3</sup>

- 2 Here are a cube and a cuboid.



Which has the greater volume?  
You **must** show your working.

[3 marks]

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Answer \_\_\_\_\_

3 A cylinder has a radius of 4 cm and a height of 6 cm

Work out the volume.

Give your answer in terms of  $\pi$

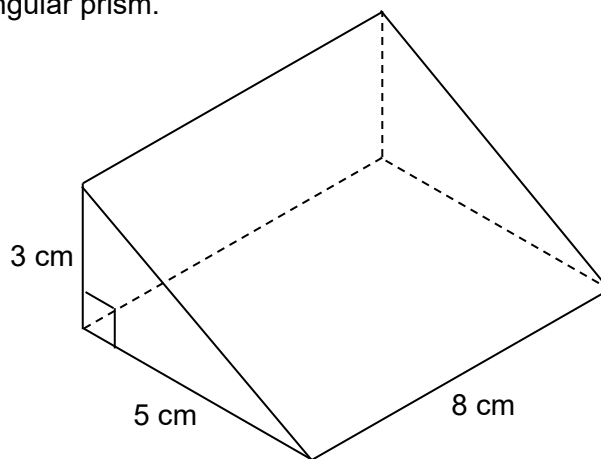
[2 marks]

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Answer \_\_\_\_\_  $\text{cm}^3$

4 Here is a triangular prism.



Work out the volume.

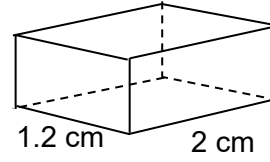
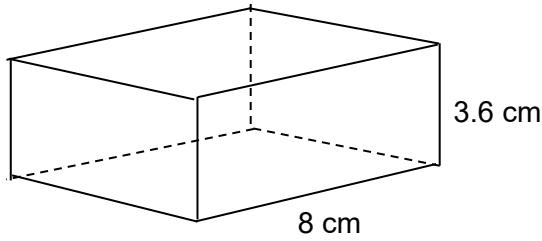
[3 marks]

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Answer \_\_\_\_\_  $\text{cm}^3$

5 These two cuboids are similar in shape.



5 (a) How many small cuboids will fill the large cuboid?

[2 marks]

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Answer \_\_\_\_\_

5 (b) Which information, given on the diagrams, is **not** necessary to answer part (a).  
Give a reason to support your answer,

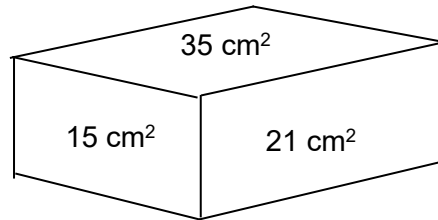
[2 mark]

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- 6 Here is a cuboid.  
The **areas** of the top and two sides are shown.



Work out the volume of the cuboid.

**[3 marks]**

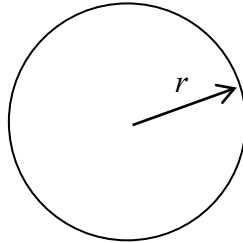
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Answer \_\_\_\_\_  $\text{cm}^3$

7 Here is a sphere.



$$\text{Volume} = \frac{4}{3}\pi r^3$$

The volume of the sphere is  $36\pi \text{ cm}^3$

Work out the value of  $r$ .

**[2 marks]**

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Answer \_\_\_\_\_