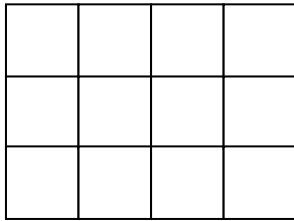# Topic Test 1 (20 minutes)
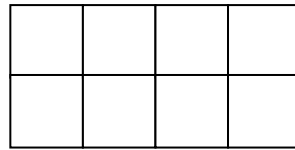## 2D representations of 3D shapes - Foundation

You will need compasses, protractor and a ruler to answer some of the questions.
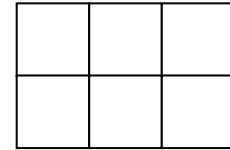
1   Here is the plan view, front elevation and side elevation of a cuboid made from 1-centimetre cubes.

Plan view   Front elevation   Side elevation
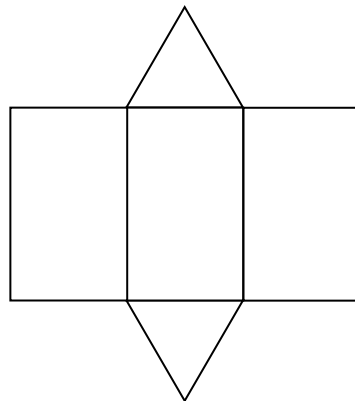
Circle the volume of the cuboid.

[1 mark]

12 cm³   24 cm³   26 cm³   52 cm³

2   Here is a net.

Circle the name of the solid formed by the net.
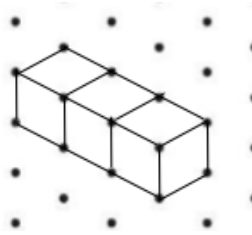
[1 mark]

Triangular based pyramid   Rectangular based pyramid

Triangular prism   Tetrahedron

3 Here is a cuboid drawn on a centimetre isometric grid.
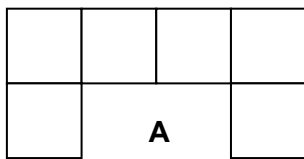

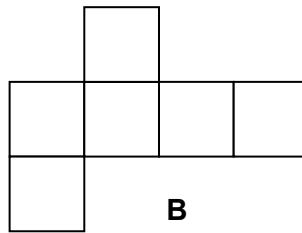Circle the surface area of the cuboid.

[1 mark]
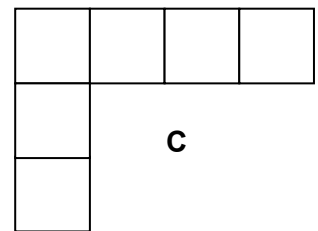
3 cm²　　　　　7 cm²　　　　　12 cm²　　　　　14 cm²

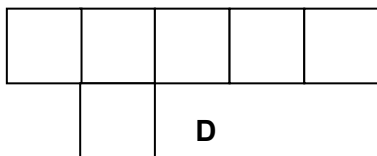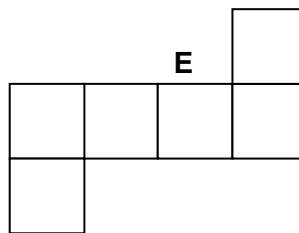**4** Here are 5 nets.

Circle the letters that show the nets of a cube.

[2 marks]

A　　　　　B　　　　　C　　　　　D　　　　　E

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England and Wales (number 3644723). Our registered address is AQA, Devas Street, Manchester M15 6EX.
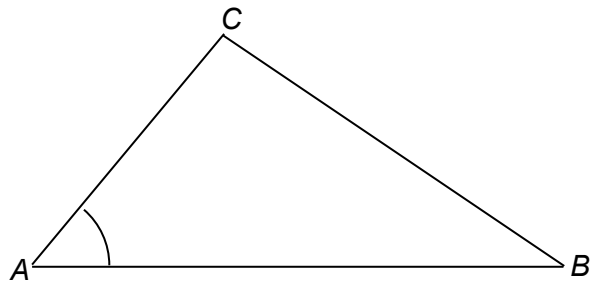
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5 This triangle is drawn accurately.

5 (a) Measure the length of *AB*.

[1 mark]

Answer _____ cm

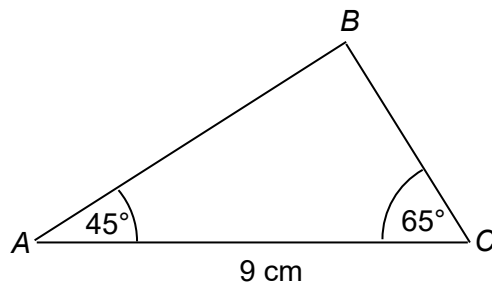**5 (b)** Write down the size of angle *A*.

[1 mark]

Answer _____ degrees

5 (c) Measure the length *BC*.
Give your answer in millimetres.

[1 mark]

Answer _____ mm

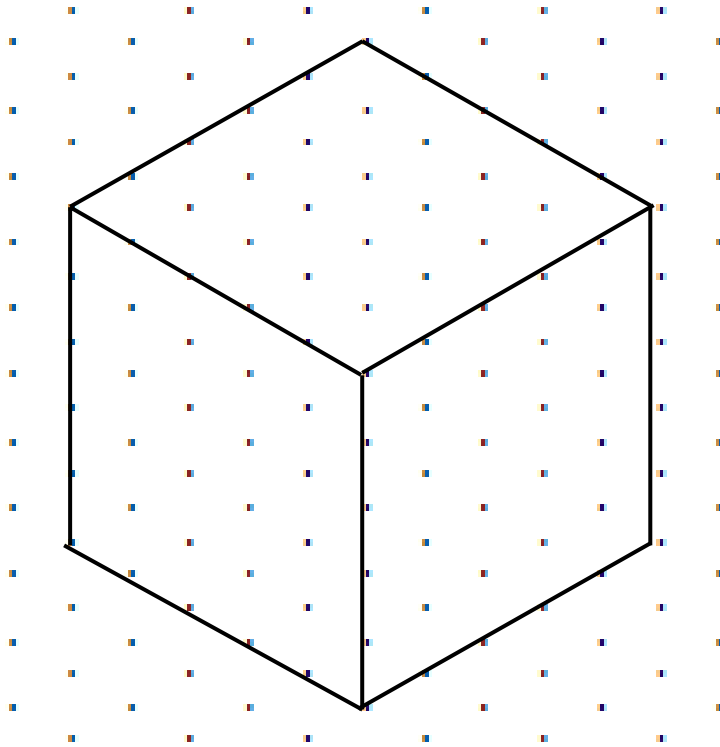**6 (a)** Make an accurate drawing of this triangle.

Not drawn accurately

[3 marks]

6 (b) Measure the length of *AB*.
Give the units of your answer.

[1 mark]

Answer _____

7 A solid 5 cm cube is made using centimetre-cubes.

7 (a) How many centimetre cubes are used to make the 5 cm cube?

[1 mark]

Answer _____

7 (b) Work out the surface area of the 5 cm cube.

[1 mark]

Answer _____ cm^2

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The **outside** of the 5 cm cube is painted black.

7 (c)   How many of the small cubes will have **three** sides painted?
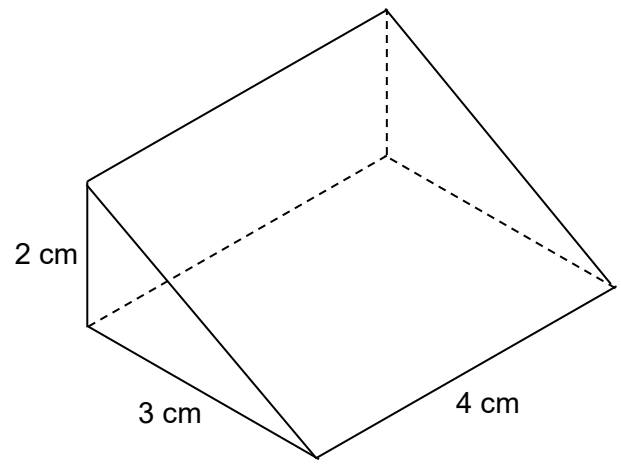
[1 mark]

Answer _____

7 (d)   How many of the small cubes will have only **one** side painted?

[2 marks]

Answer _____

8   The cross section of this prism is a right-angled triangle.

2 cm

3 cm   4 cm

On the centimetre grid draw an accurate net of the prism.

[3 marks]