

Plans and Elevations

For AQA GCSE Mathematics (8300) • Foundation tier

Name _____

Total marks: **24**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

- 1** A solid has a plan that is a circle and a front elevation that is a triangle.
Circle the solid.

[1 mark]

cylinder

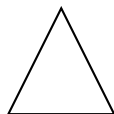
cone

sphere

pyramid

- 2** (a) Here are the front elevation, side elevation and plan of a solid.

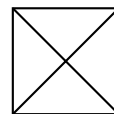
Front elevation



Side elevation



Plan



Write down the name of the solid.

[1 mark]

Answer _____

- (b) Here are the front elevation, side elevation and plan of a different solid.

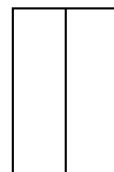
Front elevation



Side elevation



Plan

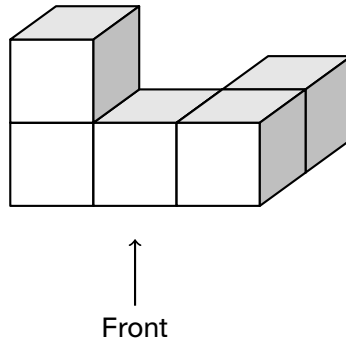


Write down the name of the solid.

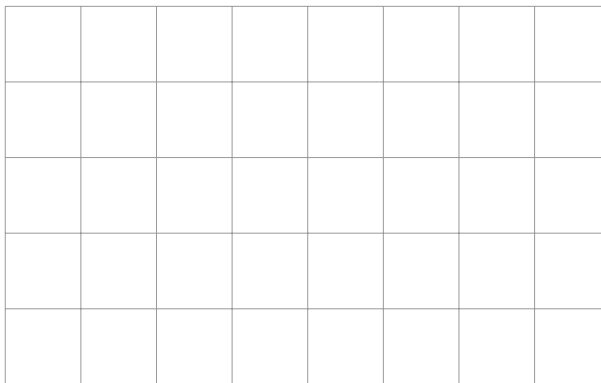
[1 mark]

Answer _____

- 3** The solid is made from five centimetre cubes.

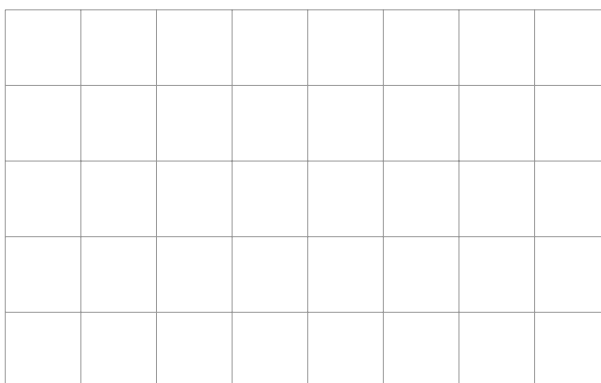


- (a) On the centimetre grid, draw the plan of the solid (the view from above).



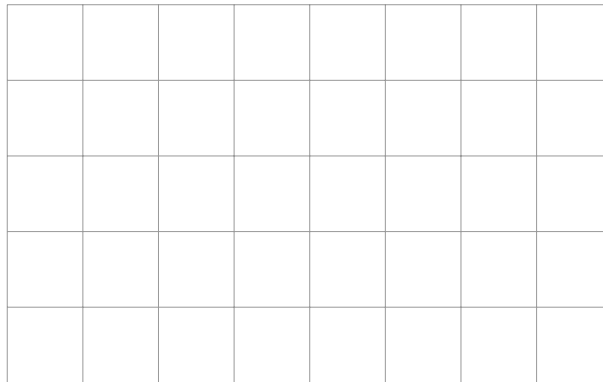
[1 mark]

- (b) On the centimetre grid, draw the front elevation of the solid.



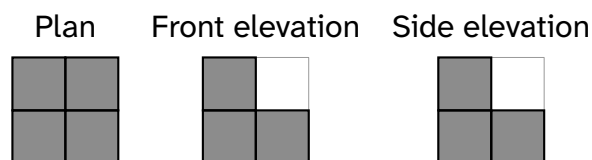
[1 mark]

- (c) On the centimetre grid, draw the side elevation of the solid (the view from the right).



[1 mark]

- 4 Here are the plan, front elevation and side elevation of a solid.



The solid is made from centimetre cubes.
How many cubes are in the solid?

[2 marks]

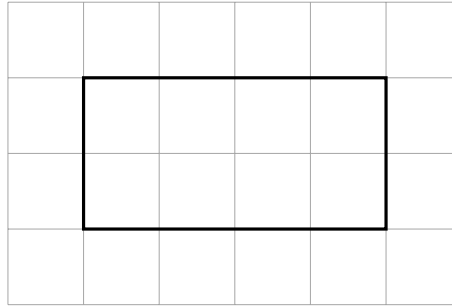
Answer _____

- 5 The plan of a cuboid is a rectangle 4 cm by 3 cm.
The front elevation is a rectangle 4 cm by 2 cm.
Work out the volume of the cuboid.

[2 marks]

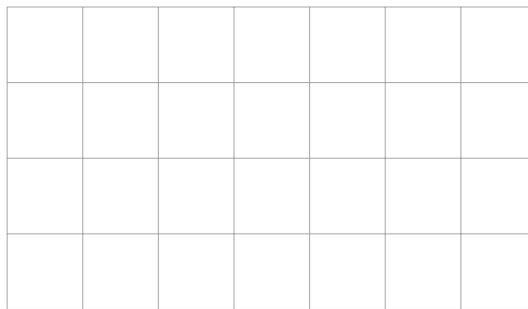
Answer _____ cm³

- 6 The plan of a cuboid is shown on the centimetre grid.



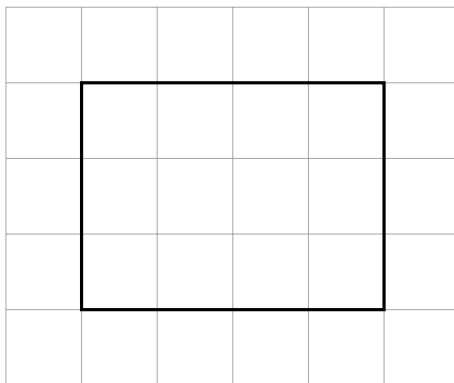
The height of the cuboid is half of its length.

Draw the side elevation of the cuboid on the centimetre grid below.



[2 marks]

- 7 The front elevation of a cuboid is shown on this centimetre grid.



The volume of the cuboid is 36 cm^3

Sam says,

“The plan of the cuboid is a square.”

Is Sam correct?

You must show your working.

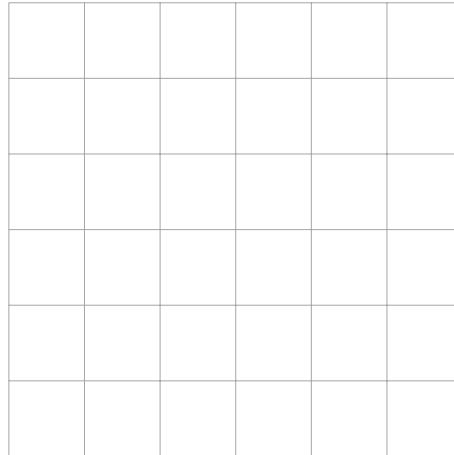
[2 marks]

☐ Yes

☐ No

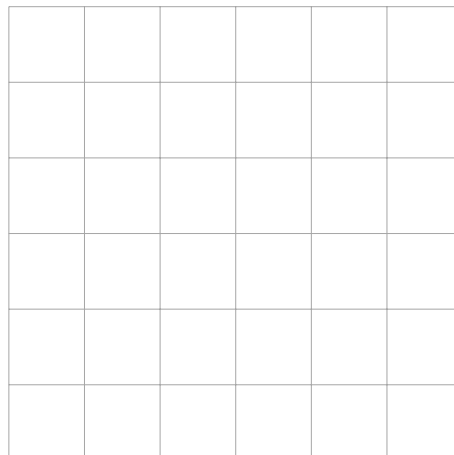
- 8** A building is in the shape of a cylinder.
It has diameter 30 m and height 45 m.

- (a) On the centimetre grid, draw a plan of the building.
Use a scale of 1 cm to 10 m



[2 marks]

- (b) On this centimetre grid, draw the front elevation of the building.
Use a scale of 1 cm to 10 m

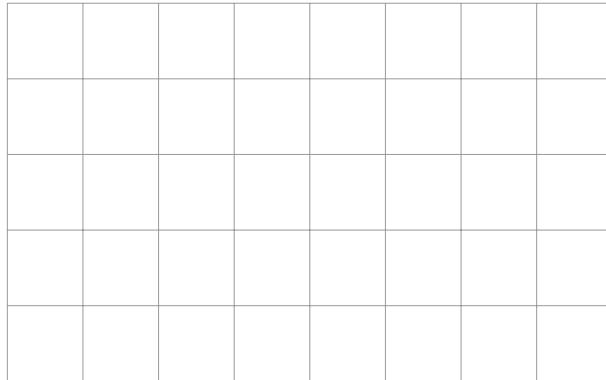


[2 marks]

- 9 A solid shape is made from centimetre cubes.
Here are the plan and front elevation of the shape.



The solid is made from 8 centimetre cubes.
On the centimetre grid, draw the side elevation of the solid (the view from the right).



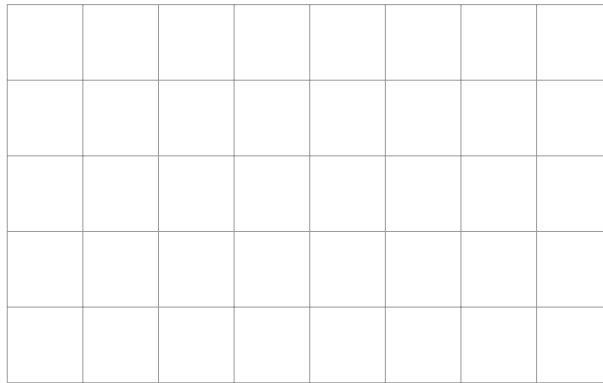
[3 marks]

- 10** A solid shape is made from centimetre cubes.
The plan shows how many cubes are in each column.

1	3	2
2	1	1

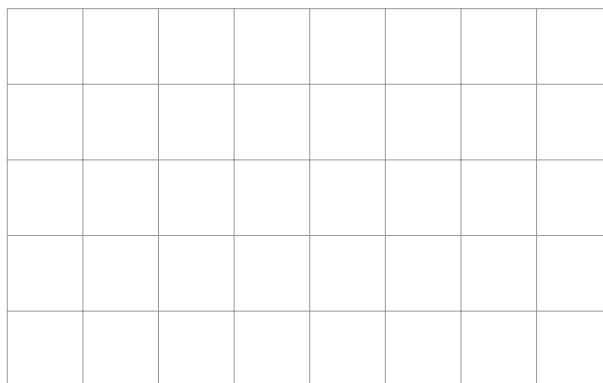
↑
Front

- (a) On the centimetre grid, draw the front elevation of the solid.



[2 marks]

- (b) On the centimetre grid, draw the side elevation of the solid (the view from the right).



[1 mark]