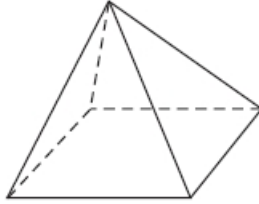


G033 Properties of 3D shapes

Q1.

Here is a square-based pyramid.



(i) How many faces does the pyramid have?

.....
(1)

(ii) How many edges does the pyramid have?

.....
(1)

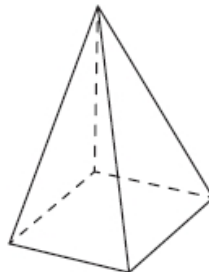
(Total for question = 2 marks)

Q2.

(a) Write down the number of faces of a cube.

.....
(1)

Here is a square-based pyramid.



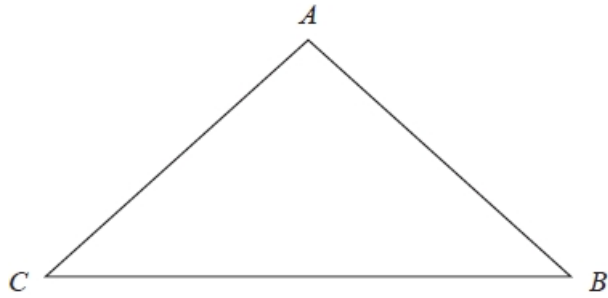
(b) Write down the number of edges.

.....
(1)

(Total for question = 2 marks)

Q3.

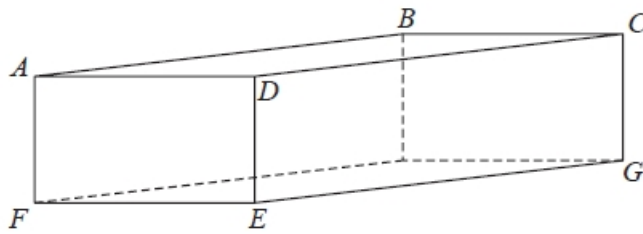
Here is a triangle ABC .



(a) Mark, with the letter y , the angle CBA .

(1)

Here is a cuboid.



Some of the vertices are labelled.

(b) Shade in the face $CDEG$.

(1)

(c) How many edges has a cuboid?

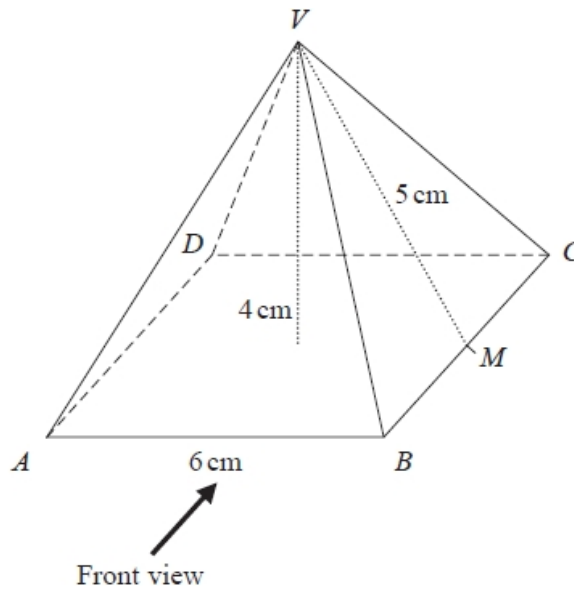
.....

(1)

(Total for question is 3 marks)

Q4.

Here is a solid square-based pyramid, $VABCD$.



The base of the pyramid is a square of side 6 cm.

The height of the pyramid is 4 cm.

M is the midpoint of BC and $VM = 5$

(a) Draw an accurate front elevation of the pyramid from the direction of the arrow.



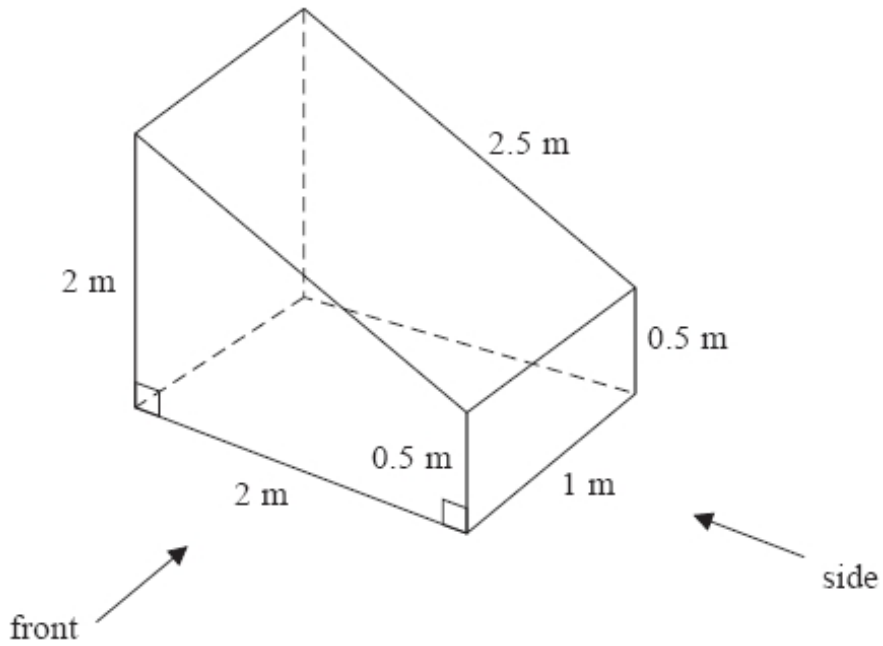
(2)

(b) Work out the total surface area of the pyramid.

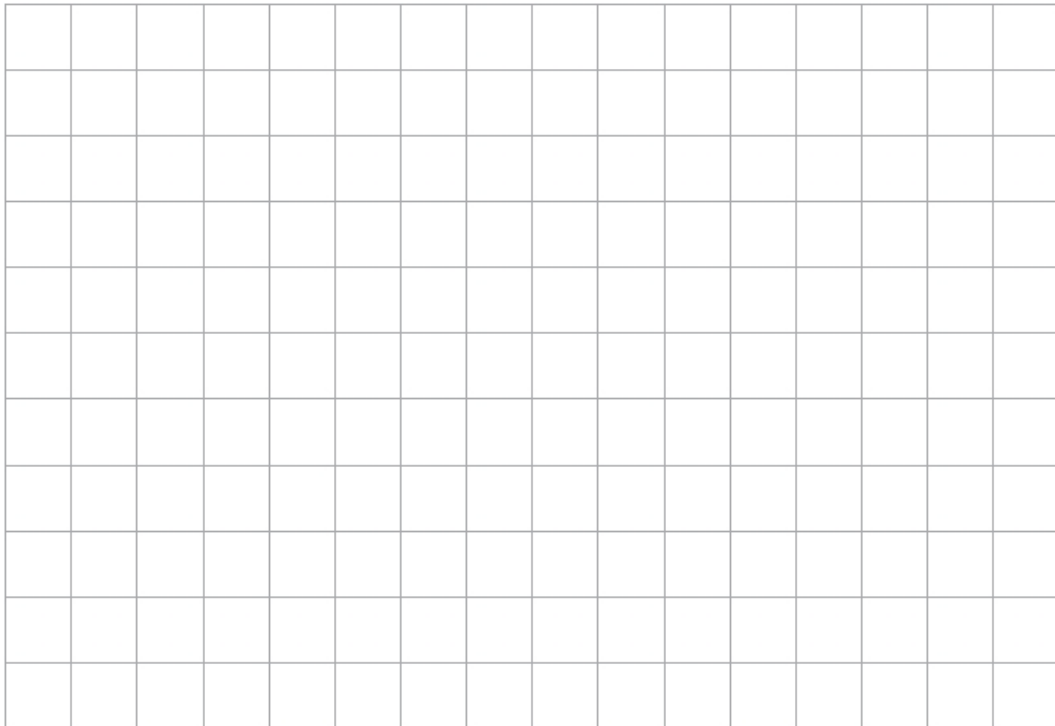
.....
(4)
(Total for question = 6 marks)

Q5.

The diagram shows a prism with a cross section in the shape of a trapezium.



On the centimetre grid below, draw the front elevation and the side elevation of the prism. Use a scale of 2 cm to 1 m.

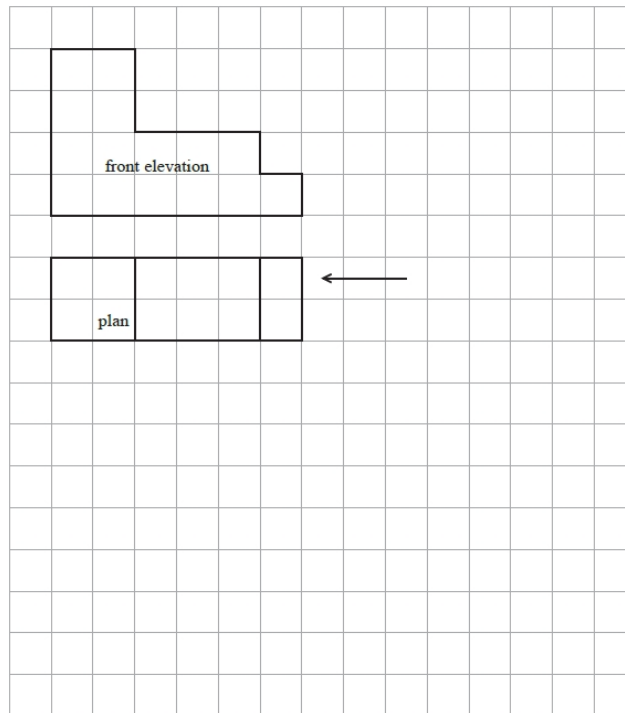


(Total for question = 4 marks)

Q6.

The front elevation and plan of a solid are shown on the grid.

On the grid, draw the side elevation from the direction of the arrow.

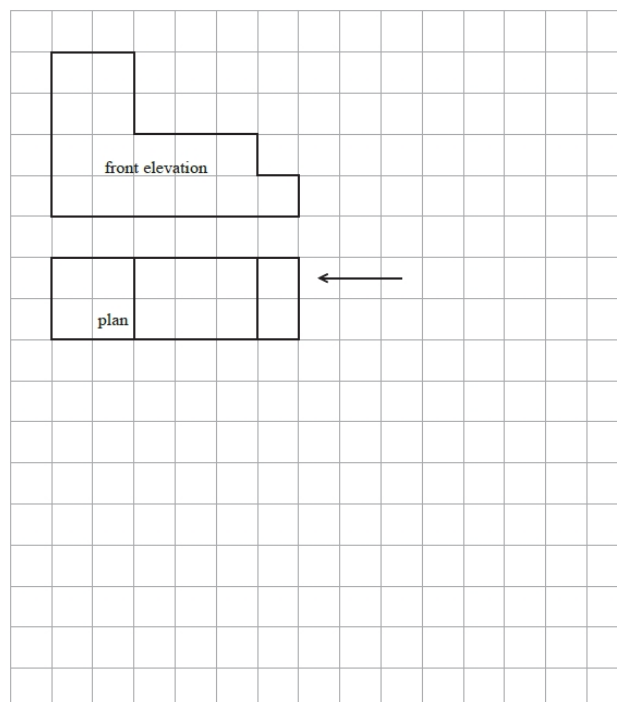


(Total for question = 2 marks)

Q7.

The front elevation and plan of a solid are shown on the grid.

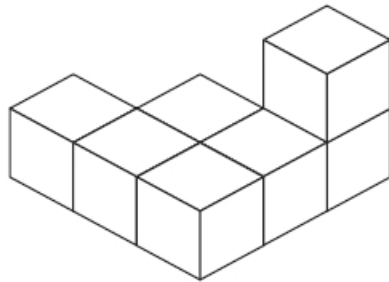
On the grid, draw the side elevation from the direction of the arrow.



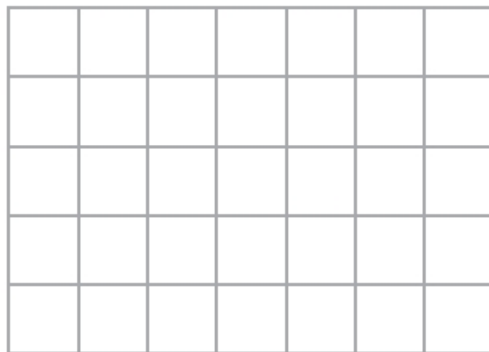
(Total for question = 2 marks)

Q8.

The diagram represents a solid made from seven centimetre cubes.



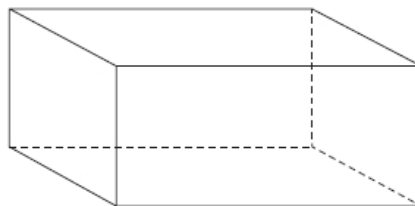
On the centimetre grid below, draw a plan of the solid.



(Total for question = 2 marks)

Q9.

Here is a 3-D shape.



(a) Write down the name of this 3-D shape.

.....
(1)

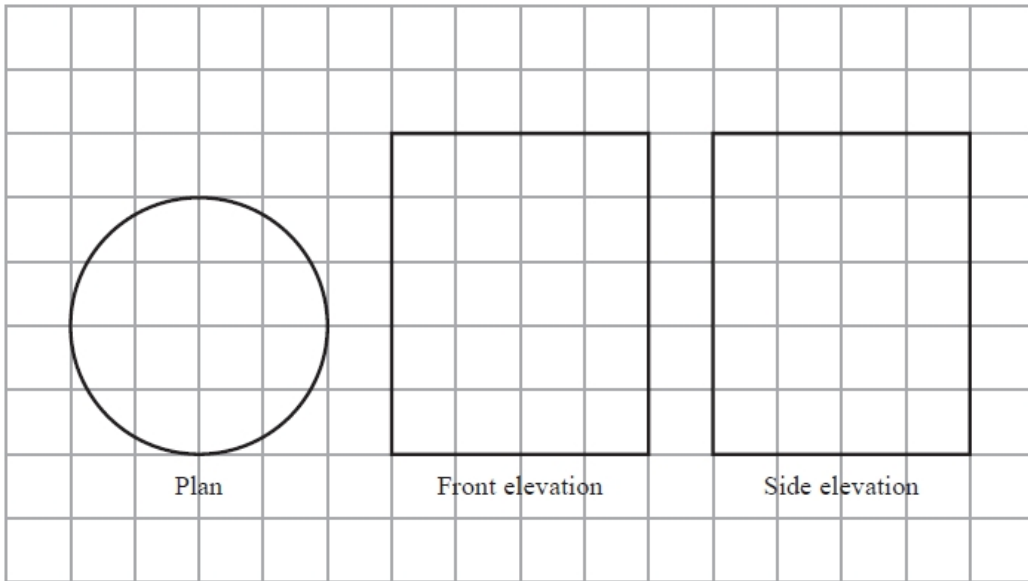
(b) Write down the number of edges of this 3-D shape.

.....
(1)

(Total for question = 2 marks)

Q10.

The diagram shows the plan, front elevation and side elevation of a solid shape, drawn on a centimetre grid.

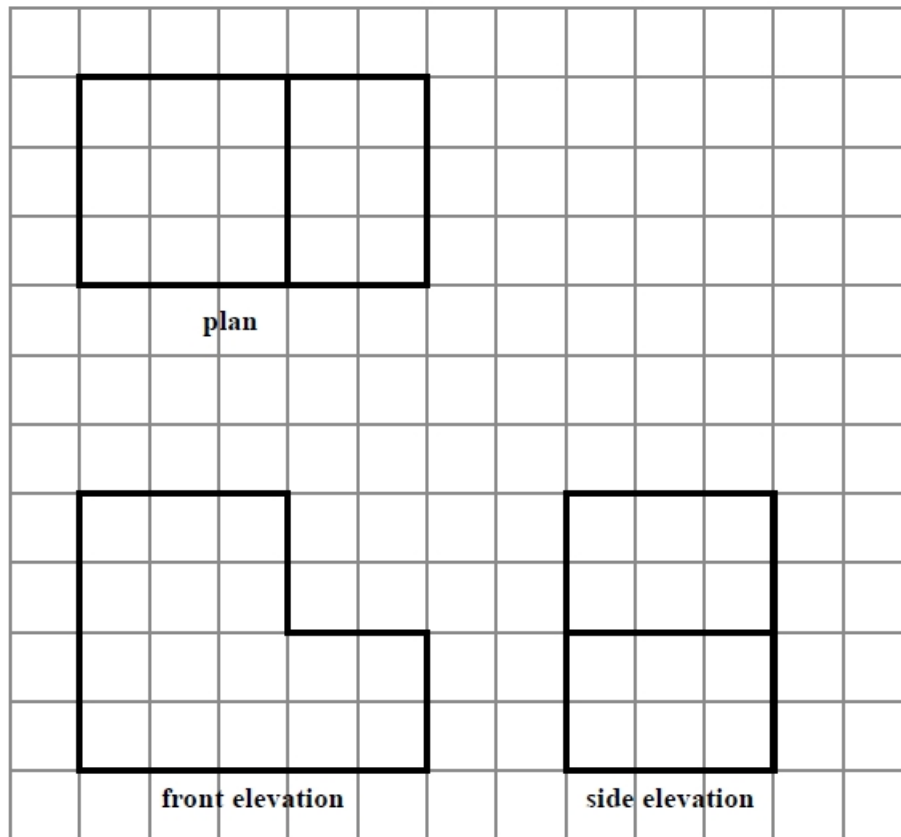


In the space below, draw a sketch of the solid shape.
Give the dimensions of the solid on your sketch.

(Total for question = 2 marks)

Q11.

The plan, front elevation and side elevation of a solid prism are drawn on a centimetre grid.



In the space below, draw a sketch of the solid prism.
Write the dimensions of the prism on your sketch.

(Total for question = 2 marks)