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

13 cm

Not drawn accurately

5 cm

10 cm

12 cm

1 (a) Work out the volume of the prism. **[3 marks]**

Answer _____ cm^3

1 (b) Work out the surface area of the prism. **[4 marks]**

Answer _____ cm^2

7

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

Not drawn
accurately

10 cm

8 cm

15 cm

6 cm
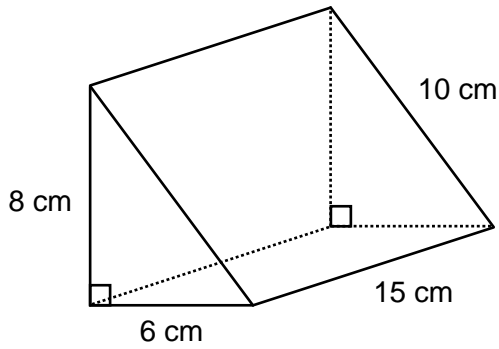
2 (a)   Work out the volume of the prism.   **[3 marks]**

Answer _____ cm³

2 (b)   Work out the surface area of the prism.   **[4 marks]**

Answer _____ cm²

3   The cross section of a prism is an isosceles triangle.

Not drawn accurately

5 cm

4 cm

7 cm

6 cm
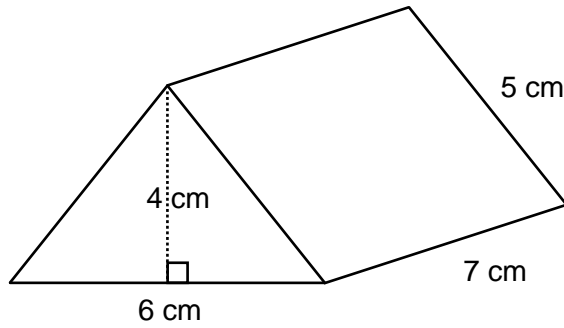
3 (a)   Work out the volume of the prism.   **[3 marks]**

Answer _____ cm^3

3 (b)   Work out the surface area of the prism.   **[4 marks]**

Answer _____ cm^2

14

Turn over ▶

4   The cross section of a prism is a trapezium.

Not drawn accurately

12 cm

5 cm

4 cm

9 cm

18 cm
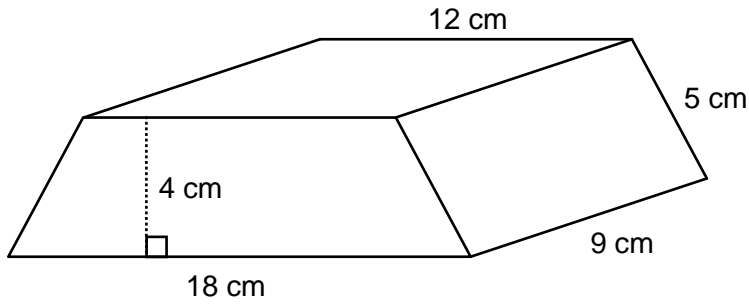
4 (a)   Work out the volume of the prism.   **[3 marks]**

Answer _____ cm³

4 (b)   Work out the surface area of the prism.   **[4 marks]**

Answer _____ cm²

5 The cross section of a prism is made from two rectangles.

Not drawn accurately

3 cm

10 cm

5 cm

8 cm

14 cm
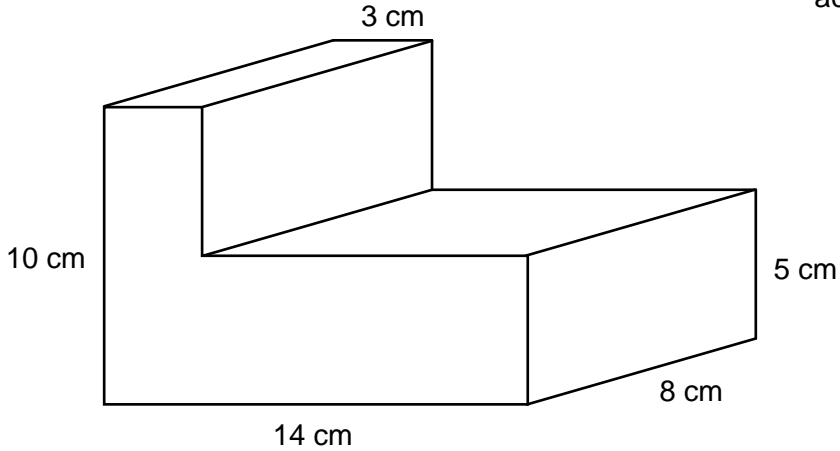
Work out the volume of the prism.

[4 marks]

Answer _____ cm³

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

Not drawn accurately

12 cm

8 cm

l cm
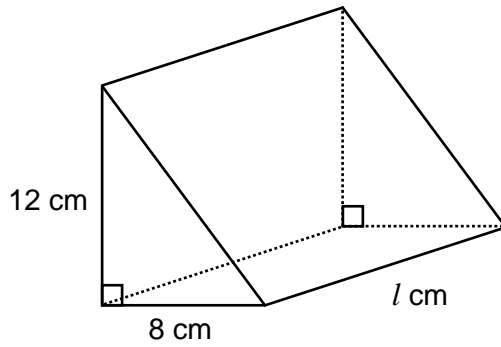
The volume of the prism = 696 cm³

Work out the value of l, the length of the prism. **[3 marks]**

$l =$ _____ cm

7 Prism **A**, Prism **B** and Prism **C** all have the same volume.

Complete the table. **[4 marks]**

	Prism A	Prism B	Prism C
Cross Sectional Area	24 cm²		40 cm²
Length	15 cm	18 cm	
Volume			

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

h cm

6 cm

12 cm
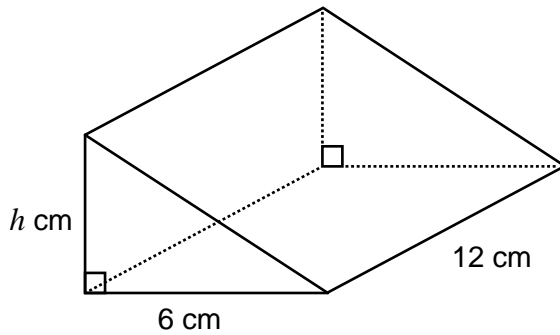
The prism has a volume of 162 cm³
Work out the value of h, the height of the right-angled triangle. **[3 marks]**

_____

_____

_____

_____

_____
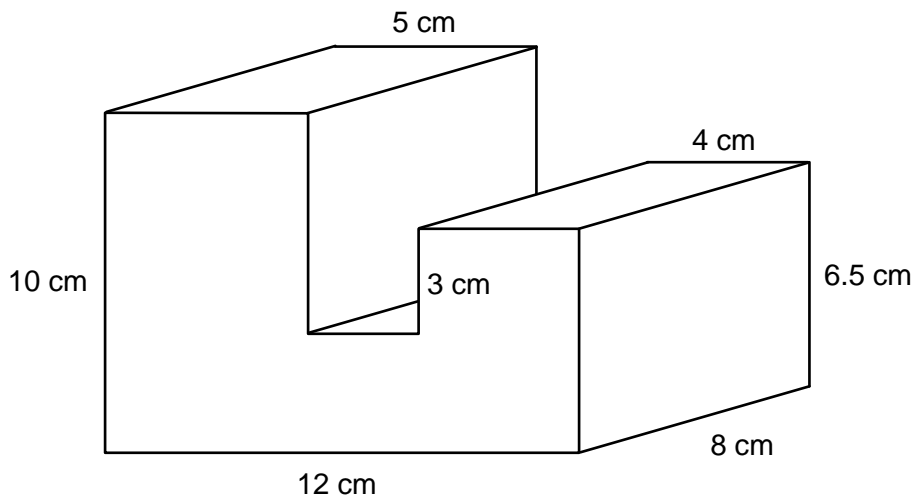
$h =$ _____ cm

9   The cross section of a prism is made from three rectangles.

Work out the volume of the prism.   **[5 marks]**

Answer _____ cm³

10   The cross section of a prism is a pentagon with one line of symmetry.

Not drawn accurately

10 cm

11 cm

5 cm

15 cm

16 cm
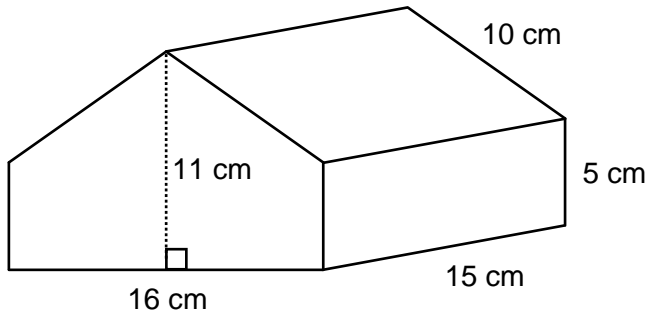
10 (a)   Work out the volume of the prism.   **[4 marks]**

Answer _____ cm³

10 (b)   Work out the surface area of the prism.   **[4 marks]**
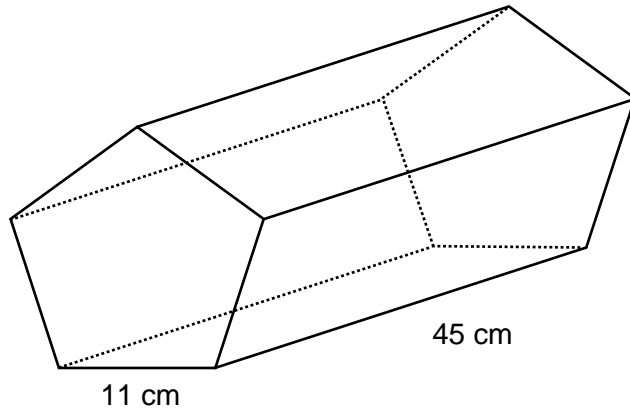
Answer _____ cm²

13

Turn over ▶

11 The cross section of a prism is a regular pentagon.

Not drawn
accurately

45 cm

11 cm

The volume of the prism = 9368 cm^3

Work out the total surface area of the prism.
Give your answer to 4 significant figures.

[4 marks]

Answer _____ cm^2

4