



Volume and Surface Area of Prisms



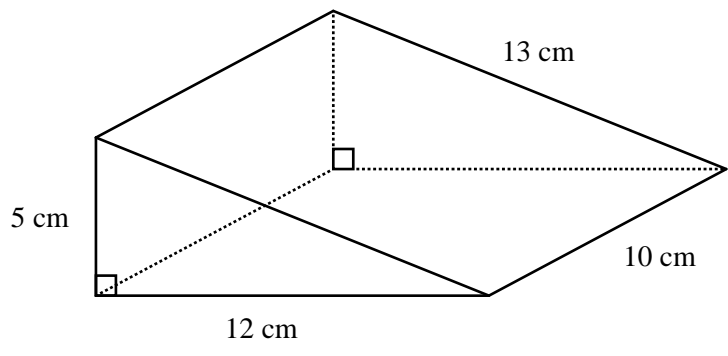
SCAN ME

REVISE THIS TOPIC

CHECK YOUR ANSWERS

SCAN ME

1 The diagram shows a prism.



(a) Work out the volume of the prism.

.....cm³
(3)

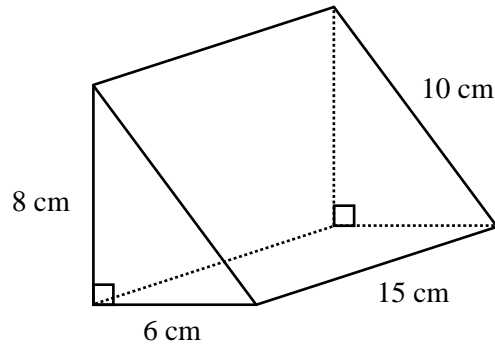
(b) Work out the surface area of the prism.

.....cm²
(4)

(Total for Question 1 is 7 marks)



2 The diagram shows a prism.



(a) Work out the volume of the prism.

..... cm³
(3)

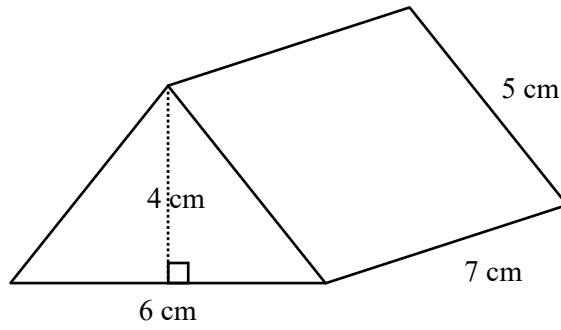
(b) Work out the surface area of the prism.

..... cm²
(4)

(Total for Question 2 is 7 marks)



3 The diagram shows a prism.



(a) Work out the volume of the prism.

.....cm³
(3)

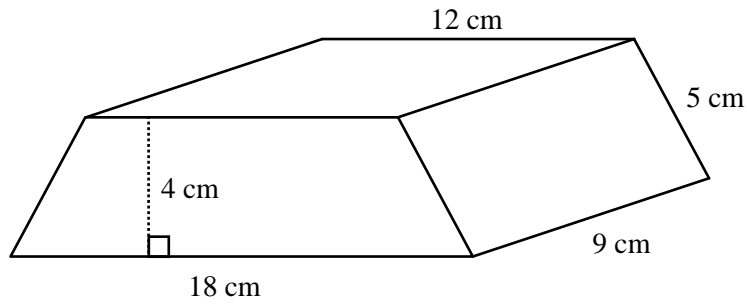
(b) Work out the surface area of the prism.

.....cm²
(4)

(Total for Question 3 is 7 marks)



4 The diagram shows a prism.



(a) Work out the volume of the prism.

..... cm³
(3)

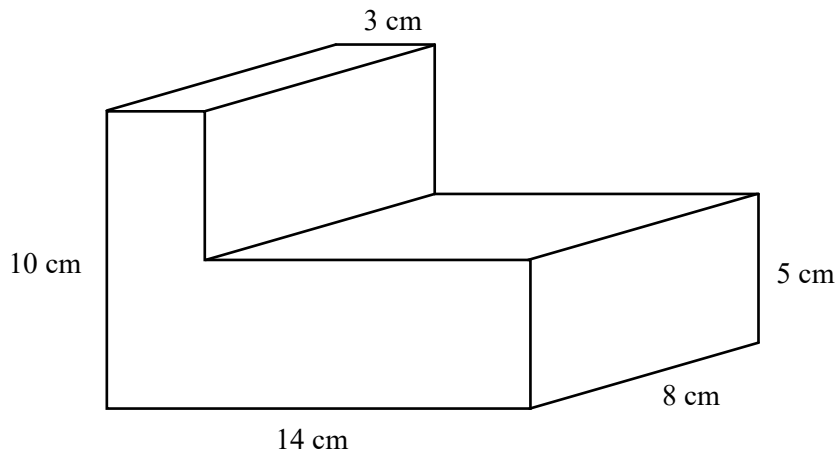
(b) Work out the surface area of the prism.

..... cm²
(4)

(Total for Question 4 is 7 marks)



5 The diagram shows a prism.



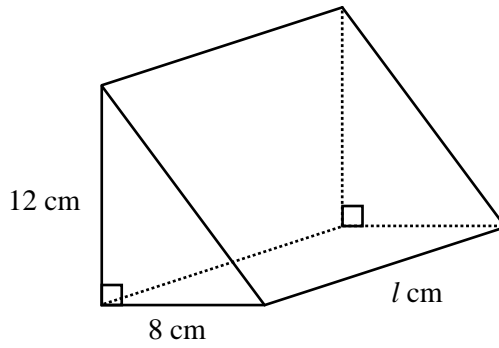
Work out the volume of the prism.

.....cm³

(Total for Question 5 is 4 marks)



6 The diagram shows a prism.



The volume of the prism = 696 cm^3

Work out the value of l , the length of the prism.

$l = \dots\dots\dots \text{cm}$

(Total for Question 6 is 3 marks)



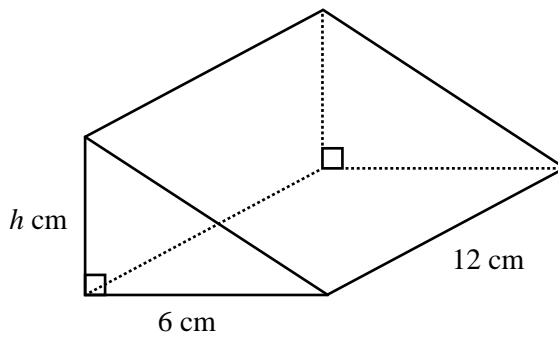
7 Prism A, Prism B and Prism C all have the same volume.

Complete the table.

	Prism A	Prism B	Prism C
Cross Sectional Area	24 cm ²		40 cm ²
Length	15 cm	18 cm	
Volume			

(Total for Question 7 is 4 marks)

8 The diagram shows a prism with a cross section that is a right-angled triangle.



The prism has a volume of 162 cm³

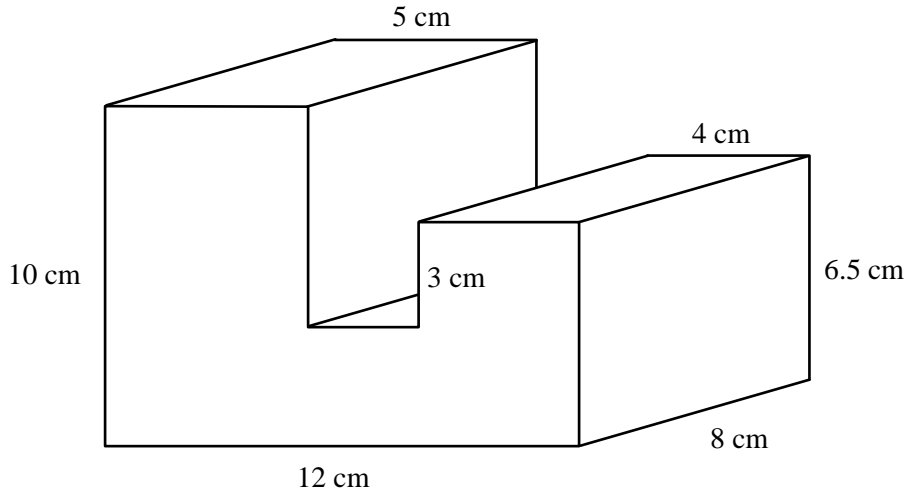
Work out the value of h , the height of the right-angled triangle.

$l = \dots\dots\dots$ cm

(Total for Question 8 is 3 marks)



9 The diagram shows a prism.



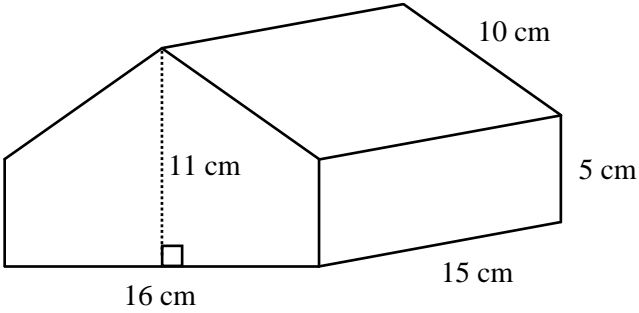
Work out the volume of the prism.

.....cm³

(Total for Question 9 is 5 marks)



10 The diagram shows a prism.



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

(a) Work out the volume of the prism.

..... cm³
(4)

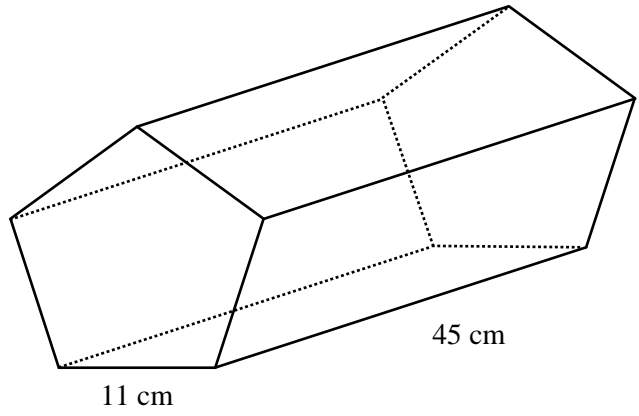
(b) Work out the surface area of the prism.

..... cm²
(4)

(Total for Question 10 is 8 marks)



11 The diagram shows a prism.



The cross section is a regular pentagon.
The volume of the prism = 9368 cm^3

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

..... cm^2

(Total for Question 11 is 4 marks)

