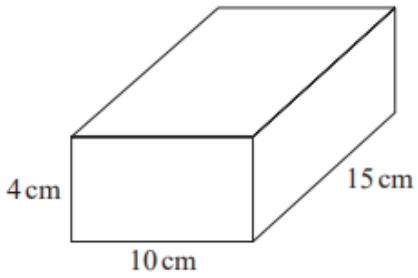
VOLUME OF A PRISM

Pearson Edexcel - Thursday 4 June 2020 - Paper 2 (Calculator) Foundation Tier

1.

11 Here is a cuboid.



Work out the volume of the cuboid.

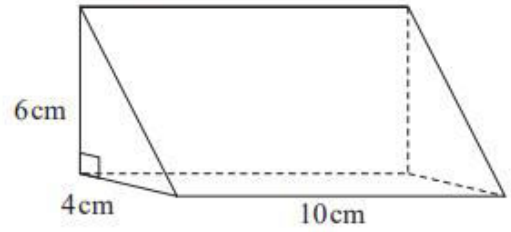
.....

(Total for Question 11 is 3 marks)

Pearson Edexcel - Monday 8 June 2020 - Paper 3 (Calculator) Foundation Tier

2.

29 The diagram shows a solid triangular prism.



The prism is made from wood with a density of 0.8 g/cm³

Work out the mass of this prism.

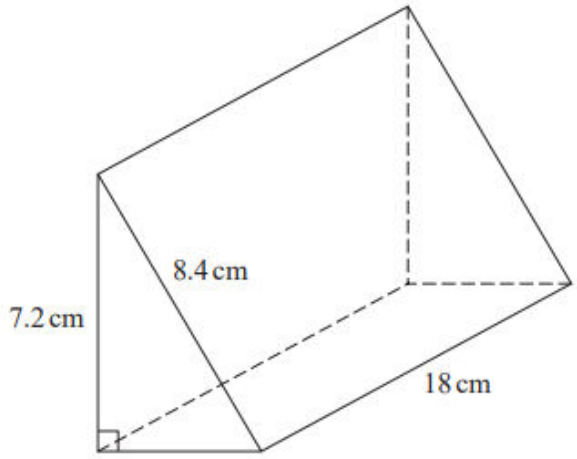
..... g

(Total for Question 29 is 3 marks)

Pearson Edexcel - Thursday 7 June 2018 - Paper 2 (Calculator) Foundation Tier

3.

26 Here is a triangular prism.



Work out the volume of the prism.
Give your answer correct to 3 significant figures.

..... cm^3

(Total for Question 26 is 5 marks)

Pearson Edexcel - Thursday 2 November 2017 - Paper 1 (Non-Calculator) Foundation Tier

4.

13 The total surface area of a cube is 294 cm^2.

Work out the volume of the cube.

..... cm^3

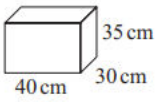
(Total for Question 13 is 4 marks)

Pearson Edexcel - Wednesday 8 November 2017 - Paper 3 (Calculator) Foundation Tier

5.

16 Chloe has a van.

She is going to use the van to deliver boxes.
Each box is a cuboid, 40 cm by 30 cm by 35 cm.



The space for boxes in the van has

maximum length	2.4 m
maximum width	1.5 m
maximum height	1.4 m

The space for boxes is empty.
Chloe wants to put as many boxes as possible into the van.

She can put 3 boxes into the van in one minute.
Assume that the space for boxes is in the shape of a cuboid.

(a) Work out how many minutes it should take Chloe to put as many boxes as possible into the van.

..... minutes
(4)

The space for boxes might **not** be in the shape of a cuboid.

(b) Explain how this could affect the time it would take Chloe to put as many boxes as possible into the van.

.....

.....

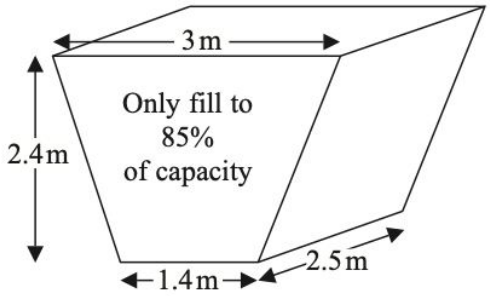
(1)

(Total for Question 16 is 5 marks)

Pearson Edexcel – Specimen 2 - Paper 3 (Calculator) Foundation Tier

6.

29 The diagram shows an oil tank in the shape of a prism.
The cross section of the prism is a trapezium.



The tank is empty.

Oil flows into the tank.
After one minute there are 300 litres of oil in the tank.

Assume that oil continues to flow into the tank at this rate.

(a) Work out how many **more** minutes it takes for the tank to be 85% full of oil.
($1\ m^3 = 1000$ litres)

..... minutes
(5)

The assumption about the rate of flow of the oil could be wrong.

(b) Explain how this could affect your answer to part (a).

.....

.....

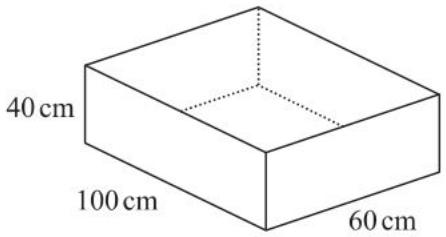
(1)

(Total for Question 29 is 6 marks)

Pearson Edexcel – Specimen 1 - Paper 1 (Non-Calculator) Foundation Tier

7.

24 The diagram shows a sand pit.
The sand pit is in the shape of a cuboid.



Sally wants to fill the sand pit with sand.
A bag of sand costs £2.50
There are 8 litres of sand in each bag.

Sally says,

"The sand will cost less than £70"

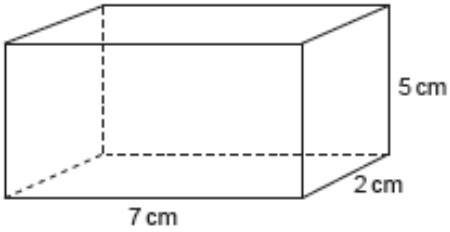
Show that Sally is wrong.

(Total for Question 24 is 5 marks)

OCR – Tuesday 03 November 2020- Morning - Paper 1 (Calculator) Foundation Tier

8.

3 Work out the volume of this cuboid.



..... cm^3 **[2]**

OCR November 09 November 2020- Morning (Calculator) Foundation Tier

9.

20 A truck is used to transport some wood panels.
Each wood panel is a cuboid measuring 2.4 m by 1.2 m by 1.8 **cm**.
The density of each wood panel is 750 kg/m^3.

The truck can carry 15 tonnes of these wood panels.

Calculate the maximum number of wood panels that the truck can carry.
Show how you decide.

..... **[6]**

OCR Tuesday 5 November 2019 – Morning (Calculator) Foundation Tier

10.

12 The volume of a cube is $125\,cm^3$.

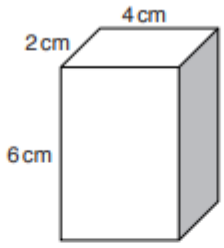
Calculate the total surface area of the cube.
Give the units of your answer.

..... **[5]**

OCR Wednesday 8 November 2017– Morning (Calculator) Foundation Tier

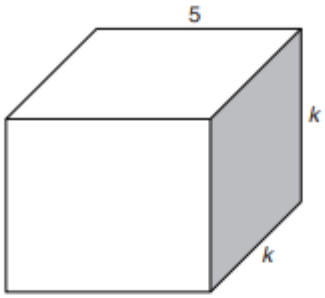
11.

3 **(a)** Calculate the volume of this cuboid.



(a) ..... cm^3 **[2]**

(b) In this cuboid all lengths are in centimetres.



The cuboid has a volume of $320\,cm^3$.

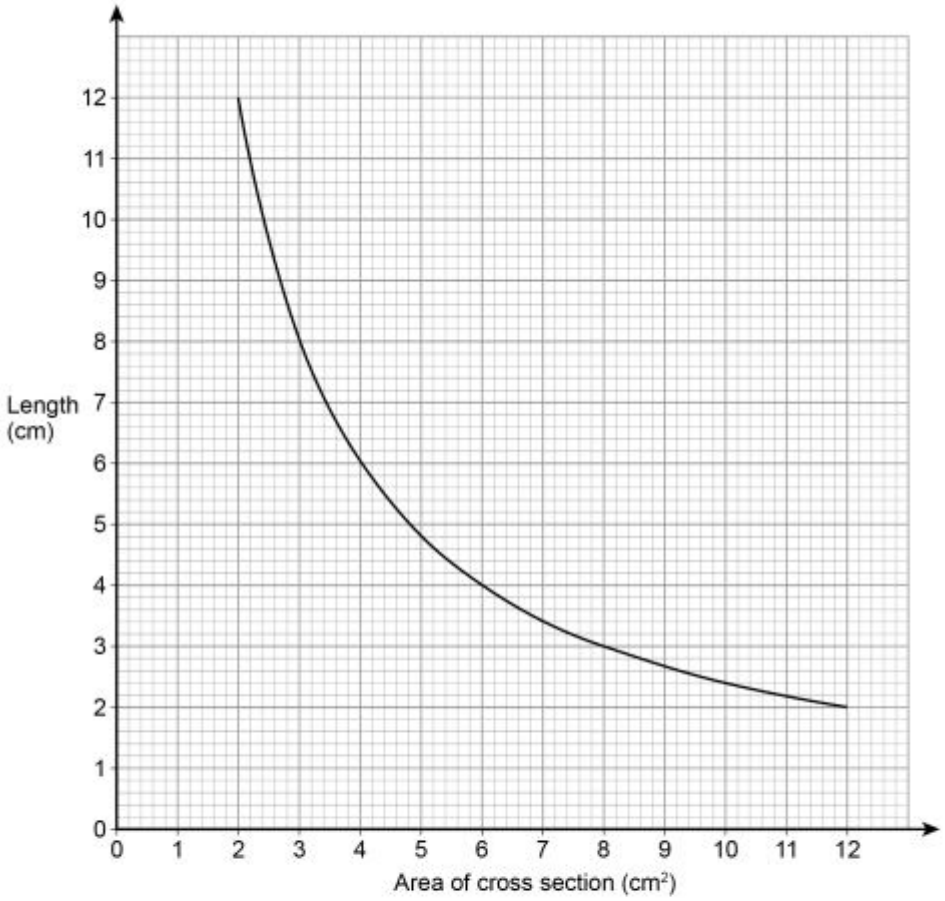
Find the value of k.

(b) k = ... **[3]**

AQA Monday 6 November 2017 – Morning (Calculator) Foundation Tier

12.

25 The graph shows information about prisms with the same volume.

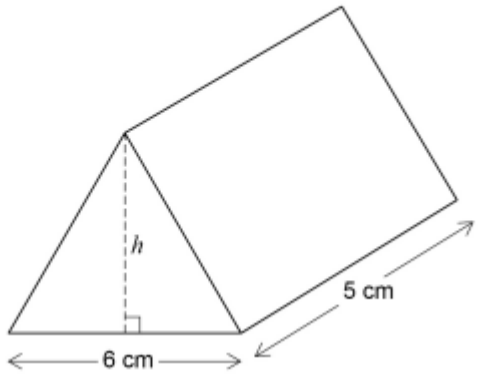


25 (a) Give **one** example to show the volume is 24 cm^3

[1 mark]

25 (b) The diagram shows a prism with volume 24 cm^3

The height of the triangular cross section is h.



Work out the height, h.

[3 marks]

Answer _____ cm