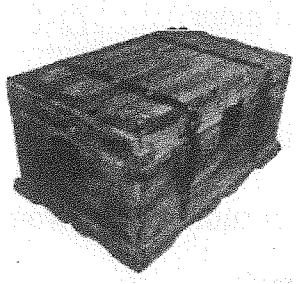
M6 -1 day to go!

Make sure that you have all your stuff... Protractor, ruler, pencil, compass....

And good luck

2 Jess has a large wooden chest in the shape of a cuboid.

The inside of the chest is 130 cm long, 40 cm wide and 20 cm tall.



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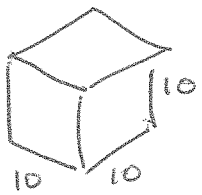
Volume $= 130 \times 40 \times 20$

$= 104000 cm^3$

Jess has a collection of one hundred 10 cm cubes.

Can all of her cubes fit into the chest?

Justify your answer.



Volume

$= 10 \times 10 \times 10$

$= 1000 cm^3$

One hundred of these

100 x volume of one

$= 100 \times 1000$

$= 100000$

Answer Yes because $4000 cm^3$ extra space inside [3]

12 The word lengths of the first 60 words in a book were recorded.

The table below shows the probability of some of these word lengths.

Number of letters	Probability
1 – 2	0.10
3 – 4	0.25
5 – 6	0.45
7 – 8	0.15
9 or more	0.05 = 5%

10%
25%
45%
15%

The first chapter contains 7500 words.

How many words of 9 or more letters would you expect in the first chapter?

5% of 7500

0.05 × 7500

without a calculator

10% of 7500

$\frac{1}{10}$ is 750

5% is half of 750

375

Answer _____ words [4]

17 Make n the subject of the formula

$$y + 8 = n - 4$$

$y+8 = n-4$

(+4) (+4) opposite bubbles

$y+12 = n$

Answer $n =$ $y+12$ [2]