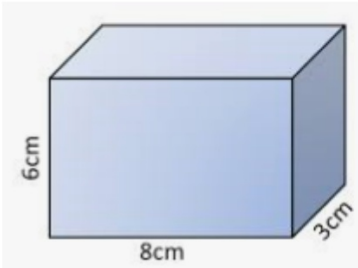
Volume and Surface Area



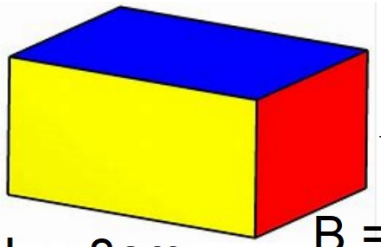
Calculating a missing side given the Volume

We are going to learn how to calculate the missing side of a cuboid when we are given the volume.

- Read through all of the notes carefully
- Copy **Page 2** into your notes jotter
- Try the questions on **Page 3** in your class jotter

Calculating a missing side given the Volume

Volume = 120cm^3



$H = x\text{cm}$

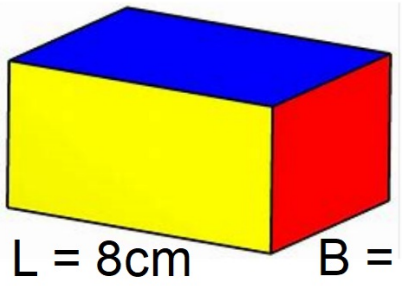
B = 5cm

L = 8cm

How can we calculate the height of the cuboid?

Calculating a missing side given the Volume

Volume = 120cm^3



Solution

$V = L \times B \times H$

$120 = 8 \times 5 \times x$

$120 = 40 \times x$ | ÷ 40

$\frac{120}{40} = x$

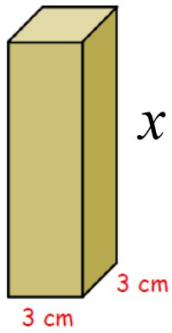
$x = 3\text{cm}$

- Write out the formula
- Fill in what you know
- Simplify
- Solve to find x

Calculate the missing side for the cuboids shown below

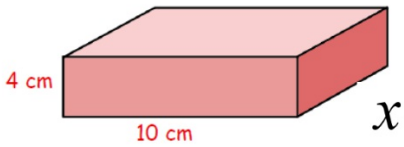
Page 3

1.



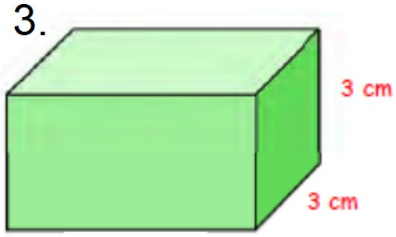
$V = 63cm^3$

2.



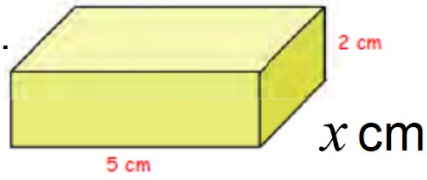
$V = 200cm^3$

3.



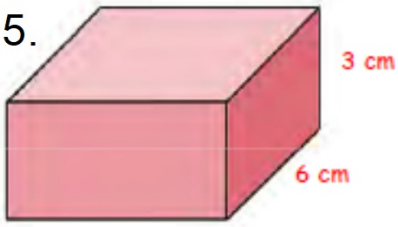
$V = 45cm^3$

4.



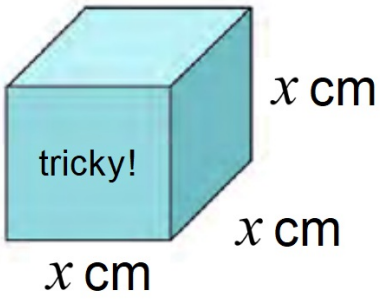
$V = 35cm^3$

5.



$V = 90cm^3$

6.



$V = 125cm^3$