



The mean of six numbers is 5.

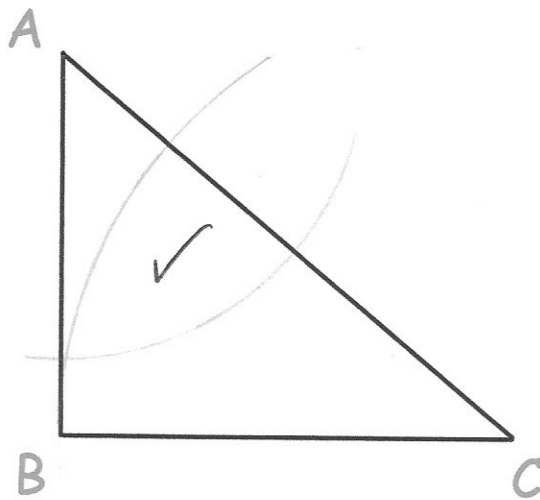
Five of the numbers are  
 $6, 6, 5, 3$  and  $1. = 21$

Work out the sixth number.

$$6 \times 5 = 30$$

$$30 - 21 = 9$$

The point D is inside triangle ABC.  
 D is less than 4cm from A and is less than 6cm from C.  
 Show on the diagram the region of possible positions of D.



Klaudia has a full 800ml bottle of car shampoo. She is going to mix some of the car shampoo with water. The bottle has this guidance

**Car Shampoo - 800ml**  
 Mix  $\frac{1}{4}$  of the car shampoo 200ml  
 with 1.8 litres of water

Klaudia is going to use 720ml of water. How much car shampoo should Klaudia use?

shampoo : water  
 $200 : 1800$   
 $1 : 9$   
 $80 : 720$

80ml

A solid sphere with radius of length 5cm, is made from a material with density  $4.2\text{g/cm}^3$

Calculate the mass of the sphere.

$$2199\text{g}$$

$$v = \frac{4}{3} \pi r^3$$

$$= \frac{4}{3} \times \pi \times 5^3$$

$$= 523.598\dots$$

$$m = d \times v$$

$$4.2 \times 523.598\dots = 2199.1\dots\text{g}$$