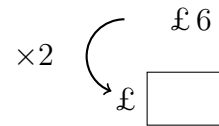
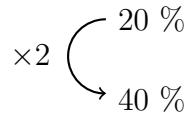


1. The teacher says 20 % costs £ 6

Complete the (i) add or the (ii) multiply method to work out 100%

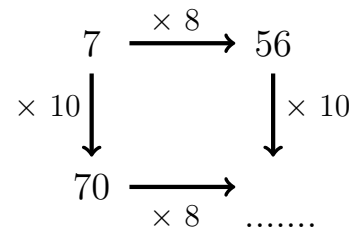
(i) add	20 %	£ 6
	20 %	£ 6
	40 %	£ <input style="width: 40px; height: 20px;" type="text"/>

(ii) multiply by 2 (a.k.a double)



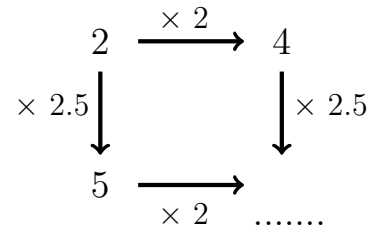
2. (a) Complete the missing number in these proportional pairs.

You may use the ↓ or the → scale factor.



(b) Complete the missing number in these proportional pairs.

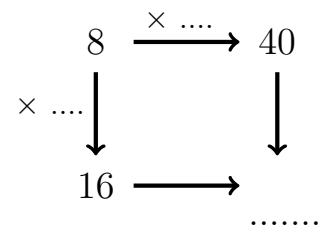
You may use the ↓ or the → scale factor.



3. (i) Complete the ↓ and the → scale factors.

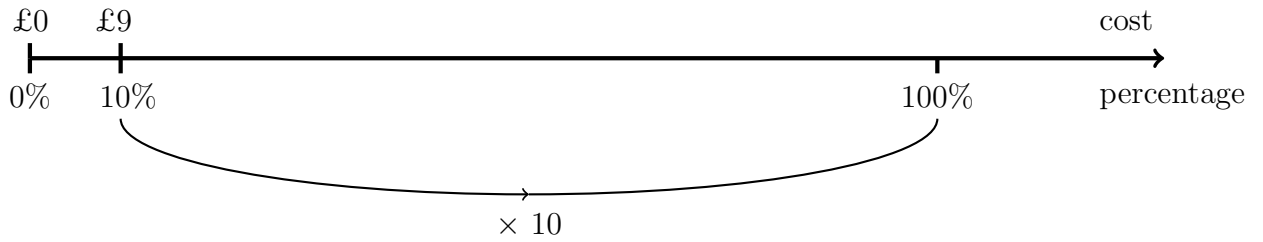
You may use the 8 row of the times table grid.

×	2	3	4	5	6	7	8	9	10
8	16	24	32	40	48	56	64	72	80



(ii) Complete the missing value of these proportional pairs.

4. (a) In a sale Maksymilian can get 10% off a jacket.  
 Maksymilian could save £9 if he buys the jacket.  
 Work out the original price (100%) of the jacket.



- (b) You may use these rows of the times table grid to make the equivalent fractions correct.  
 (i) Complete the  $\uparrow$  **OR** the  $\rightarrow$  scale factor.

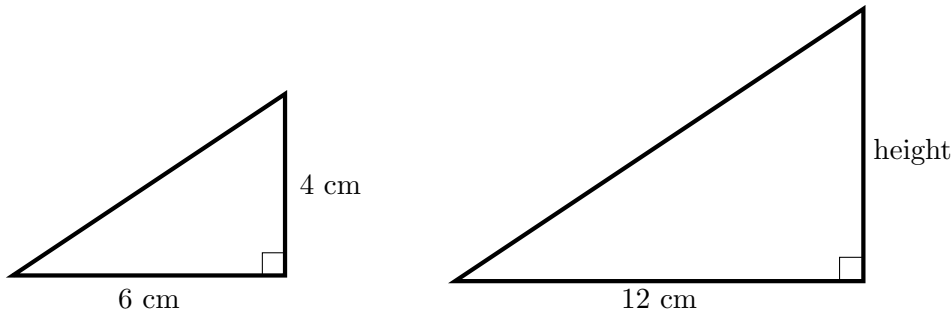
$$\times \dots \left( \frac{4}{9} = \frac{\square}{54} \right)$$

$\times \dots$

×	2	3	4	5	6	7	8	9	10
4	8	12	16	20	24	28	32	36	40
...	...	...	...	...	...	...	...	...	...
9	18	27	36	45	54	63	72	81	90

- (ii) Use your chosen scale factor to write the missing value in the box.

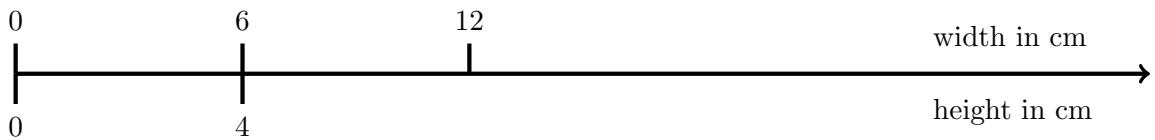
5. (a) Here are two similar right-angled triangles. {F.Y.I. the length of their sides are proportional, so they look the same as each other but as if they were further away or closer.}



Diagrams NOT accurately drawn

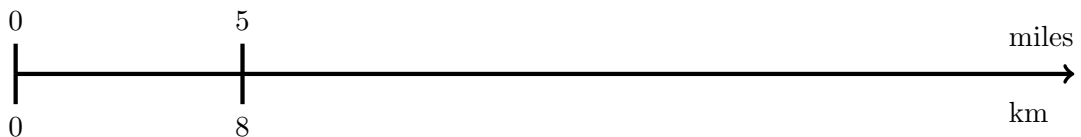
Work out the height, in centimetres, of the larger triangle.

You may use this proportional line.



- (b) A coach travels 80 kilometres between two towns in France.  
 What is the distance between these towns in miles?  
 Use 8 kilometres equals 5 miles.

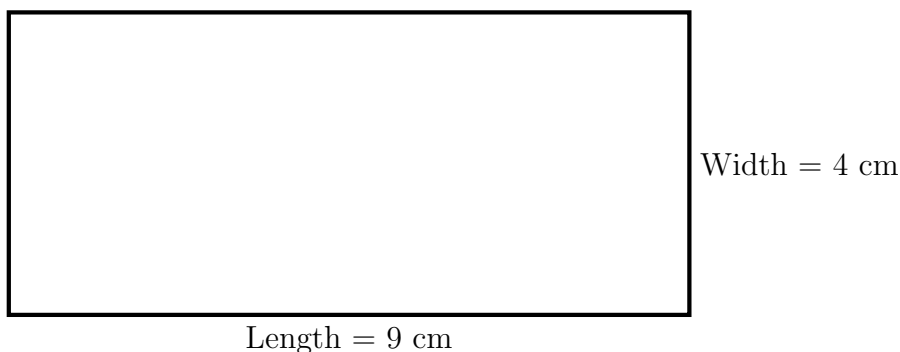
You may use this proportional line.



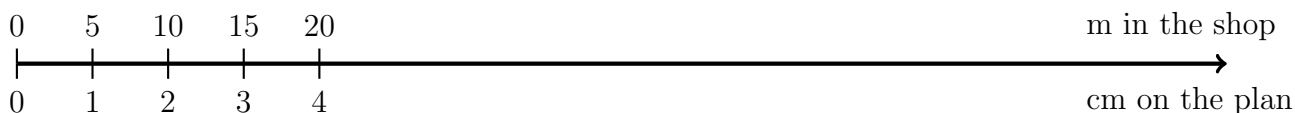
6. (a) Complete:

$$\frac{3}{25} = \frac{\quad}{100} = \dots\dots\dots\%$$

(b) Here is a scale diagram of a carpet shop.



In this diagram, 1 cm represents 5 metres.



Complete this table.

	scale diagram	real life measurement
Length	9 cm	
Width	4 cm	20 m

7. (a) Shaan wants to buy 8 razor blades.

A shop sells the same type of razor blades in two different size packs.

**small** 4 razor blades for £11.95

**large** 8 razor blades for £21.50

What should he buy to get best value for money?

You must show all your working.

(b) In a sale Florence can get 20% off a T.V.

Florence could save £55 if she buys the T.V.

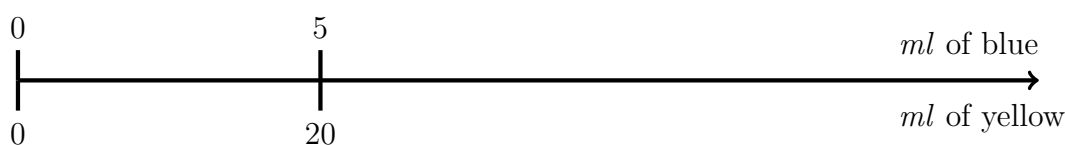
Work out the original price (100%) of the T.V.

8. **Spring green** paint is made by mixing 20 ml of yellow paint with 5 ml of blue paint.

Vihaan has 50 millilitres of yellow paint.

How many millilitres of blue paint should he use to make spring green?

You may use this proportional line.



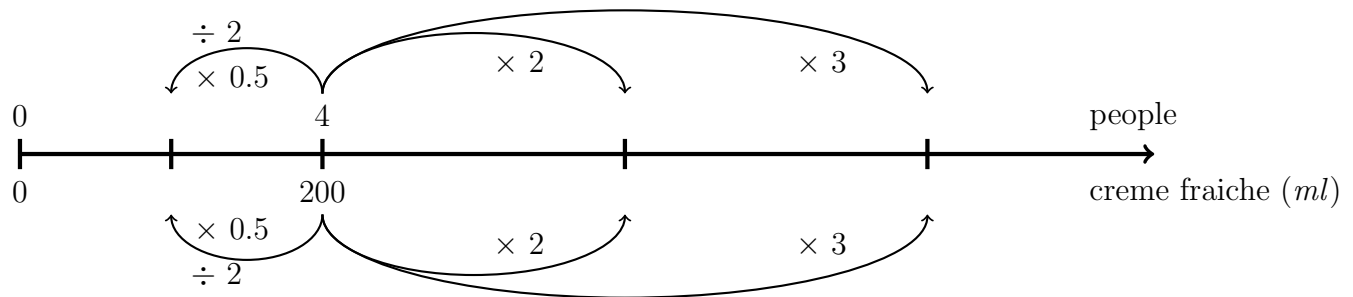
9. Here is the list of ingredients for making chickpea soup for 4 people.

Chickpea soup		
Ingredients for 4 people		
220	g	dried chickpeas
1		small red chilli
6		cloves of garlic
1	tbsp	coriander seeds
1	tbsp	cumin
1	tsp	tumeric
40	g	butter
200	ml	creme fraiche

Nzingha is going to make chickpea soup for 6 people.

Work out the amount of creme fraiche she needs.

You may use this proportional line.



10. Here is the list of ingredients for making Gazpacho soup for 6 people.

Gazpacho soup		
Ingredients for 6 people		
600	g	of tomatoes
120	g	of cucumber
2		spring onions
1		red pepper
50	ml	of olive oil
20	ml	of wine vinegar

Maria is going to make Gazpacho soup for 15 people.

Work out the amount of each ingredient she needs.

11. (a) Here are the first four terms in a number sequence.

11          22          33          44

Jackie says “If I double the 4th term, I will get the 8th term”

Is Jackie correct?

Explain your answer.

- (b) Here are the first five terms of an arithmetic sequence.

9          16          23          30          37

Mysha says “If I double the 4th term, I will get the 8th term”

Is Mysha correct?

Explain your answer.