

Problem solving – fraction of a quantity 1

- 1 a) Amelia has completed $\frac{1}{6}$ of her maths homework.

How many questions in total does Amelia need to complete?

I have answered 3 questions so far.



3 questions

$$3 \times 6 = 18$$

Amelia has to complete 18 questions in total.

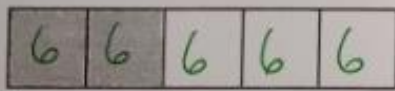


Amelia

- b) Amelia has learnt $\frac{2}{5}$ of her spellings homework.

How many spellings does she have to learn in total?

I have learnt 12 spellings so far.



12 spellings

$$12 \div 2 = 6$$

$$6 \times 5 = 30$$

Amelia has to learn 30 spellings in total.



Amelia

2 a) $\frac{3}{5}$ of a number is 15.

What is the number?

The number is .

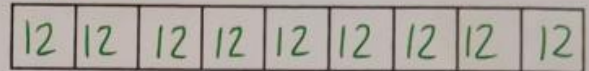


b) $\frac{4}{9}$ of a number is 48.

What is the number?

The number is .

$$48 \div 4 = 12$$



$$12 \times 9 = 108$$

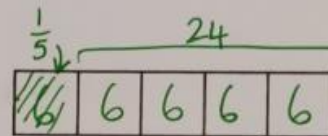
3 A box contains some buttons.

$\frac{1}{5}$ of the buttons are taken out.

There are 24 buttons left.

How many buttons were there at the start?

There were buttons at the start.



$$24 \div 4 = 6$$

$$6 \times 5 = 30$$

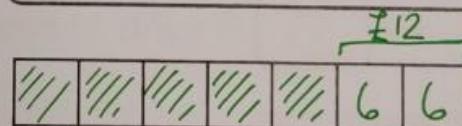
4 Ethan has some money.

He gives $\frac{5}{7}$ of the money to his friend.

He has £12 left.


How much money does he give to his friend?

Ethan gives £ to his friend.



$$12 \div 2 = 6$$

$$6 \times 5 = 30$$

5 Fill in the missing boxes. 

$$27 \div 9 = 3$$

a) $\frac{3}{5}$ of 15 = 9 $9 \div 3 = 3$
3 3 3 3 3 $3 \times 5 = 15$

b) 4 $\frac{12}{9}$ of 27 = 12
3 3 3 3 3 3 3 3 3 3

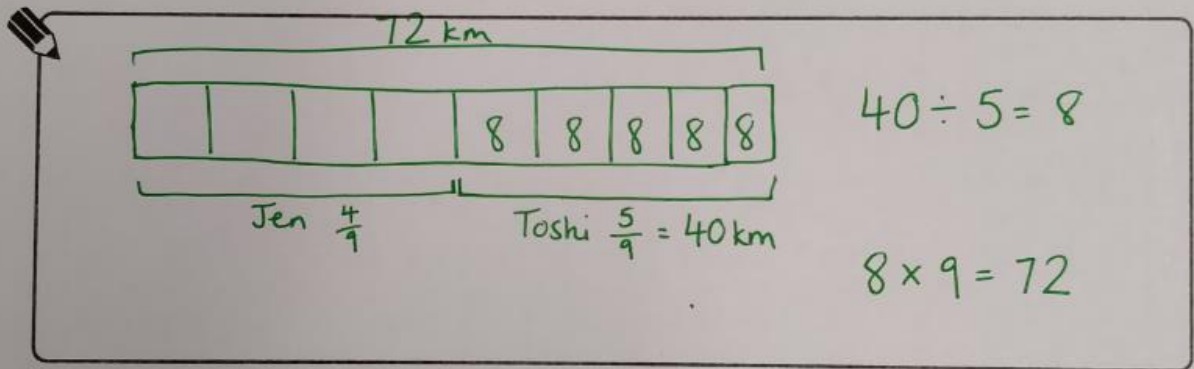
6 Jen and Toshi are driving back from a holiday.

They are going to share the driving.

Jen is going to do $\frac{4}{9}$ of the driving.

Toshi knows he is going to drive for 40 km.

What is the total distance they have to drive?



The total distance Jen and Toshi have to drive is 72 km.

Reflect

Draw a diagram to explain how you would work out the whole amount if $\frac{3}{5}$ is equal to £60.

Hopefully you've drawn a bar model a bit like this: