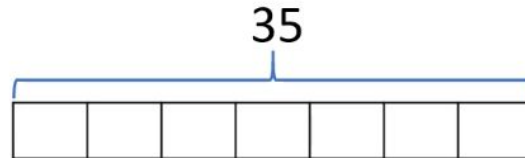


I can find fractions of an amount - find the whole.

4.12.20

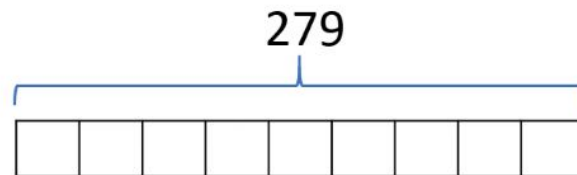
Warm up...

1) $\frac{1}{7}$ of 35 =



2) $\frac{5}{7}$ of 35 =

3) $\frac{1}{9}$ of 279 =



4) $\frac{4}{9}$ of 279 =

Examples

$$\frac{1}{6} \text{ of } \boxed{} = 30$$

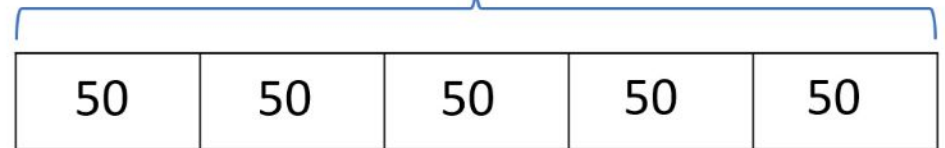
180



$$30 \times 6 = 180$$

$$\frac{2}{5} \text{ of } 250 = 100$$

250



100

$$100 \div 2 = 50$$

$$50 \times 5 = 250$$

Our task...

Fill in the missing information.

a) $\frac{1}{3}$ of = 20

b) $80 = \frac{4}{10}$ of

$\frac{2}{3}$ of = 20

$800 = \frac{4}{10}$ of

$\frac{4}{5}$ of = 20

$8 = \frac{4}{10}$ of

$\frac{4}{5}$ of = 120

$80 = \frac{4}{100}$ of

Our task...

Mo pours $\frac{2}{5}$ of a full bottle of orange juice into an empty glass.

The glass now has 500 ml of orange juice in it.

How many ml of orange juice is left in the bottle?



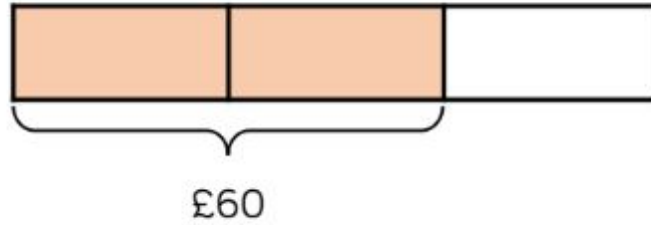
Your Task

Varied fluency and problem solving questions.

Your task...

Varied Fluency

- Jack has spent $\frac{2}{3}$ of his money.
He spent £60, how much did he have to start with?



Use a bar model to represent and solve the problems.

- Rosie eats $\frac{2}{5}$ of a packet of biscuits. She eats 10 biscuits.
How many biscuits were in the original packet?
- In an election, $\frac{3}{8}$ of a town voted. If 120 people voted, how many people lived in the town?

Calculate:

$$\frac{1}{4} \text{ of } \underline{\quad} = 12$$

$$\frac{1}{4} \text{ of } \underline{\quad} = 36$$

$$\frac{1}{4} \text{ of } \underline{\quad} = 108$$

$$\frac{1}{12} \text{ of } \underline{\quad} = 12$$

$$\frac{3}{4} \text{ of } \underline{\quad} = 36$$

$$\frac{4}{4} \text{ of } \underline{\quad} = 108$$

Reasoning and problem solving...

Eva lit a candle while she had a bath.
After her bath, $\frac{2}{5}$ of the candle was left.
It measured 13 cm.

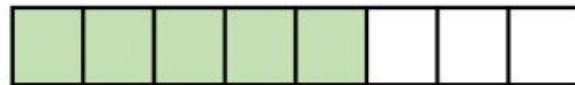
Eva says:



Before my bath
the candle
measured 33 cm

Is she correct?
Explain your reasoning.

Write a problem which this bar model
could represent.



Reasoning and problem solving...

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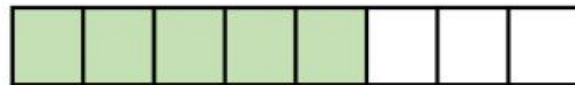
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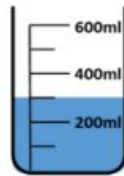
She is incorrect.
 $13 \div 2 = 6.5$
 $6.5 \times 5 = 32.5\text{cm}$

She either didn't
halve correctly or
didn't multiply
correctly

Many possibilities.
 $\frac{5}{8}$ of children have
blue eyes. 15
children do not
have blue eyes.
How many
children are there
altogether?

Reasoning and problem solving...

Rosie and Jack are making juice.
They use $\frac{6}{7}$ of the water in a jug and are
left with this amount of water:



To work out how much
we had originally, we
should divide 300 by 6
then multiply by 7

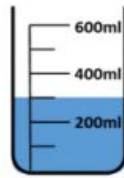


No, we know that
300ml is $\frac{1}{7}$ so we need
to multiply it by 7

Who is correct?
Explain your reasoning.

Reasoning and problem solving...

Rosie and Jack are making juice.
They use $\frac{6}{7}$ of the water in a jug and are left with this amount of water:



To work out how much we had originally, we should divide 300 by 6 then multiply by 7



No, we know that 300ml is $\frac{1}{7}$ so we need to multiply it by 7

Who is correct?
Explain your reasoning.

Rosie is correct.
Jack would only be correct if $\frac{6}{7}$ was **remaining** but $\frac{6}{7}$ is what was used.
Rosie recognised that $\frac{1}{7}$ is left in the jug therefore multiplied it by 7 to correctly find the whole.

Plenary...


| Level 6 ▾ | Fractions ▾ | $\frac{?}{4}$ of Amounts Linked to $\times 4$ Table ▾ | | |
|-----------|-------------|-------------------------------------------------------|----------------------|--------------------------------------------------------------------------|
| | | Unit Fractions of Amounts | Fractions of Amounts | Decimal Equivalents |
| | | $\frac{1}{2}$ | $\frac{?}{3}$ | $\frac{?}{10}$ |
| | | $\frac{1}{3}$ | $\frac{?}{4}$ | $\frac{1}{2}$ $\frac{1}{4}$ $\frac{3}{4}$ $\frac{?}{10}$ $\frac{?}{100}$ |
| | | $\frac{1}{4}$ | $\frac{?}{5}$ | $\frac{1}{2}$ $\frac{?}{5}$ $\frac{?}{10}$ |
| | | $\frac{1}{5}$ | $\frac{?}{6}$ | $\frac{?}{5}$ $\frac{?}{10}$ $\frac{?}{100}$ |
| | | $\frac{1}{6}$ | $\frac{?}{7}$ | $\frac{?}{3}$ $\frac{?}{4}$ $\frac{?}{8}$ |
| | | $\frac{1}{7}$ | $\frac{?}{8}$ | Mixed |
| | | $\frac{1}{8}$ | $\frac{?}{9}$ | |
| | | $\frac{1}{9}$ | $\frac{?}{10}$ | |
| | | $\frac{1}{10}$ | $\frac{?}{11}$ | |
| | | $\frac{1}{11}$ | $\frac{?}{12}$ | |
| | | $\frac{1}{12}$ | | |

Level 5 ▾ Ordering ▾ Choose ▾

Addition
Subtraction
Ordering
Partitioning
Digit Values
Rounding
Multiplication
Division
Doubles/Halves
Fractions

Daily 10

Mental Maths Challenge



Topm

Test your knowledge with these challenges. How quick can you answer them?

Plenary...

True or False ?

Fraction of an amount - find the whole

$\frac{1}{4}$ of Mr Bashir's monthly wage is £180

$\frac{2}{5}$ of Mrs Bashir's monthly wage is £300

Mr Bashir earns more money than Mrs Bashir.

Plenary...

True or False ?

Fraction of an amount - find the whole

False

£720

Mr Bashir



£750

Mrs Bashir

