

MATHS



KS2 National Curriculum Tests Thresholds

	Mathematics	Reading	GPS
Marks to meet Expected Standard (Scaled Score 100+)	54	27	35
Marks to meet Greater Depth/Higher Standard* (Scaled Score 110+)	93	40	53
Total Marks Possible	110	50	70

Scaled Scores

2024 national curriculum tests

Key stage 2

Mathematics

Paper 1: arithmetic

First name				
Middle name				
Last name				
Date of birth	Day	Month	Year	
Verbal name				
GD number				

30 minutes – 40 marks

2022 national curriculum tests

Key stage 2

Mathematics

Paper 2: reasoning

First name				
Middle name				
Last name				
Date of birth	Day	Month	Year	
School name				

40 minutes 35 marks

2022 national curriculum tests

Key stage 2

Mathematics

Paper 3: reasoning

First name				
Middle name				
Last name				

40 minutes 35 marks

% of questions in each of the different areas.

KS2 Maths SATS papers analysis (2024)
Percentage of questions by content domain

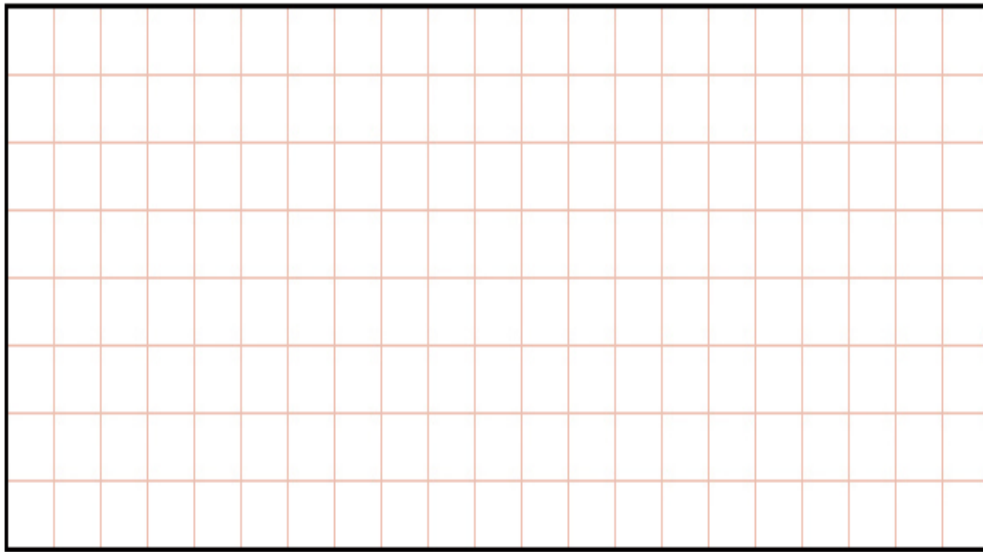
Content domain	2018	2019	2022	2023	2024
Number & PV	11	9	9	11	10
Calculations	32	30	38	32	35
FDP	27	24	23	26	26
Ratio & prop	7	8	8	7	6
Algebra	6	6	3	4	3
Measurement	8	9	7	8	8
Shapes	5	7	6	5	7
Pos & direction	2	3	2	2	2
Statistics	2	4	3	4	3

Arithmetic Questions

Arithmetic Paper 1	Percentage of marks for each content domain			
	Number and place value	Calculation	Fractions and decimals	Ratio and proportion
2022	2.5%	55%	30%	12.5%
2023	2.5%	55%	35%	7.5%
2024	2.5%	60%	32.5%	5%

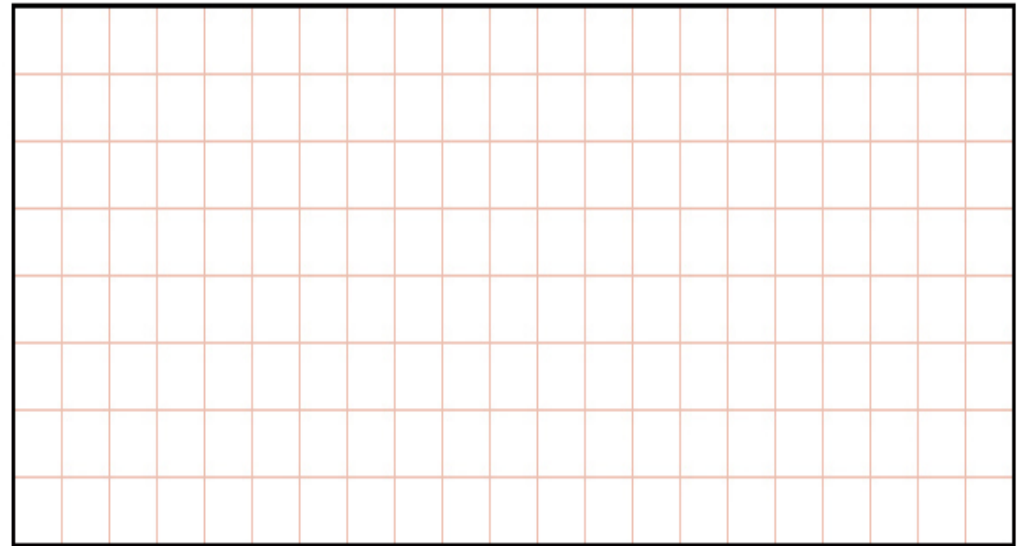
Some of the questions and our approaches

$640 \div 8 =$



1 mark

$= 630 \div 7$



1 m

Tell me what this tells you.

$$60 \times 40 =$$

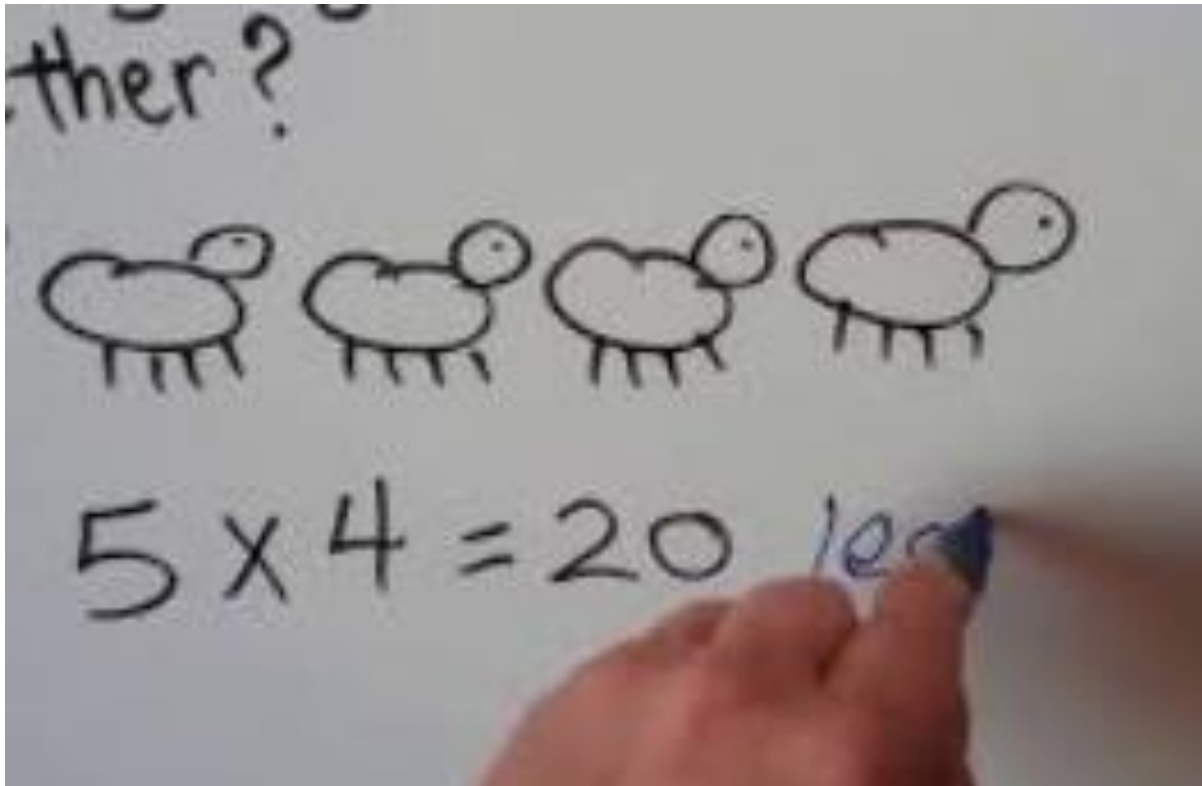
2400

$$\begin{array}{r} 60 \\ \times 40 \\ \hline 240 \\ + 00 \\ \hline 2400 \end{array}$$

$$41.79 + 25.3 + 25.7 - 41.79$$



How can you show what 5×4 is to someone who doesn't understand what it actually means?



Emma buys 5 bunches of flowers.

Each bunch of flowers costs £1.20



How much does Emma pay altogether?



Emma buys 5 bunches of flowers.

Each bunch of flowers costs £1.20

5

$$\begin{array}{r} \textcircled{1} \text{ £1.20} + \\ + \text{ £1.20} \\ \hline \text{£2.40} \end{array}$$



£1.20

$$\begin{array}{r} \textcircled{4} \text{ £4.80} \\ + \text{ £1.20} \\ \hline \text{£6.00} \end{array}$$

$$\begin{array}{r} \textcircled{5} \text{ £6.00} \\ + \text{ £1.20} \\ \hline \text{£7.20} \end{array}$$

£ 7.20

$$\begin{array}{r} \textcircled{2} \text{ £2.40} \\ + \text{ £1.20} \\ \hline \text{£3.60} \end{array}$$

$$\begin{array}{r} \textcircled{3} \text{ £3.60} \\ + \text{ £1.20} \\ \hline \text{£4.80} \end{array}$$

How much does Emma pay altogether?

Emma buys 5 bunches of flowers.
Each bunch of flowers costs £1.20

£1.20

How much does Emma pay altogether?

56

5	2	1	2	3
---	---	---	---	---

$$\begin{array}{r} 56 \\ + 44 \\ \hline 100 \\ - 20 \\ \hline 80 \end{array}$$

$$\begin{array}{r} 1.20 \\ 1.20 \\ 1.20 \\ 1.20 \\ 1.20 \\ \hline 6.00 \end{array}$$

$$\begin{array}{r} 2.40 \\ + 1.20 \\ \hline 3.60 \end{array}$$

$$\begin{array}{r} 3.60 \\ + 1.20 \\ \hline 4.80 \end{array}$$

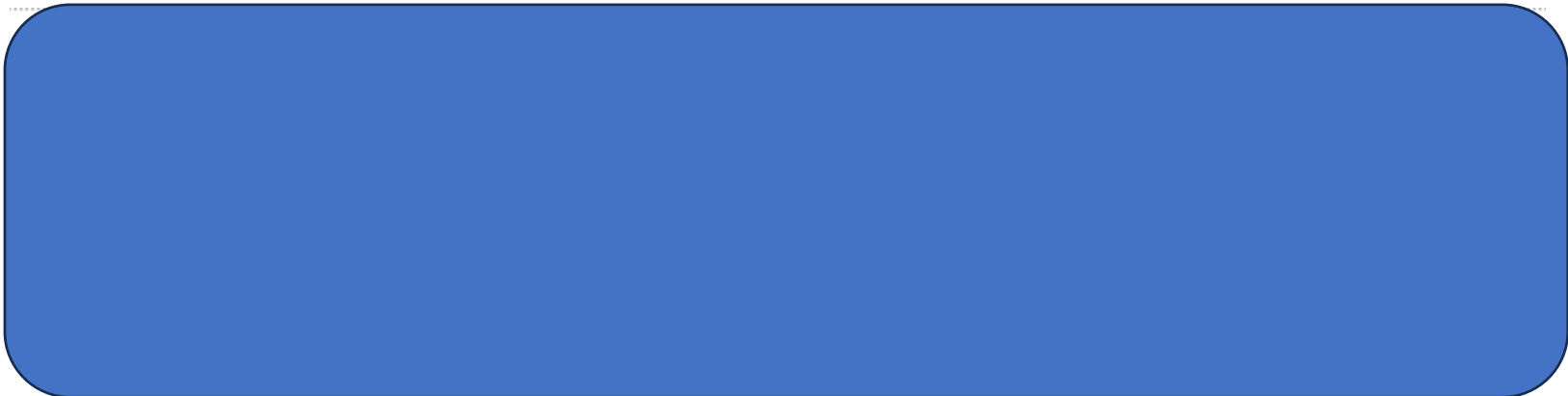
$$\begin{array}{r} 4.80 \\ + 1.20 \\ \hline 6.00 \end{array}$$

$$\begin{array}{r} 6.00 \\ + 1.20 \\ \hline 7.20 \end{array}$$

£ 60

1 5

£1.5



There's always more than 1 way to answer a question.

- A box holds 40 packets of envelopes.
- Each packet holds 25 envelopes
- How many envelopes does the box hold?



40 packets

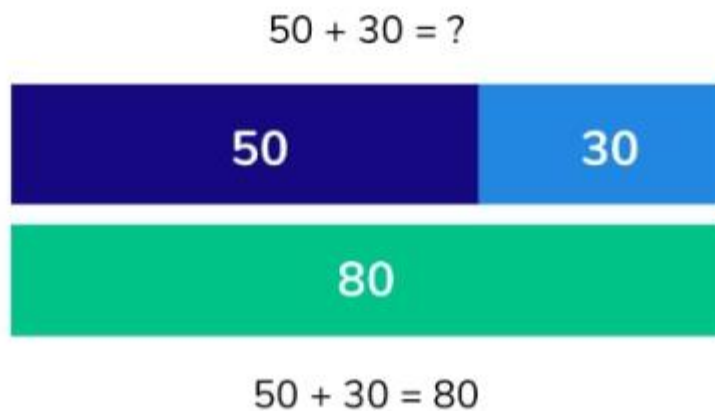


25 envelopes in a
pack

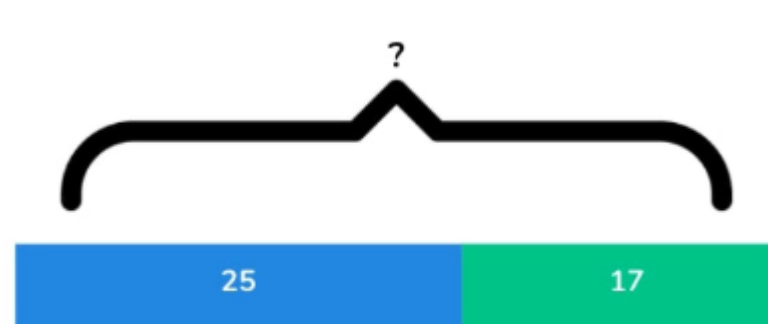
$$40 \times 25 =$$

Bar Modelling- What is it?

- The bar model is a pictorial representation of a maths problem that uses rectangles to represent both known and unknown quantities (missing numbers).
- Early years and primary students can draw bars to represent values in maths problems. This can help them to answer the question more easily and can develop number sense.

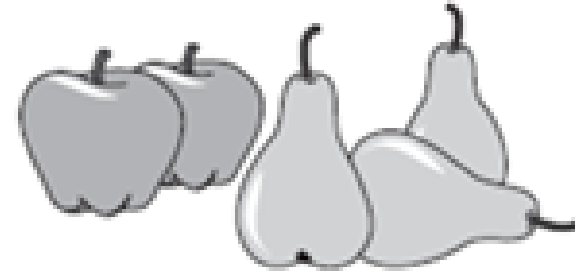


There were 25 people on the bus. Then 17 more people got on the bus. How many people are on the bus altogether?



Seb bought 2 apples and 3 pears.

He spent £1.59 altogether.



Apples cost 24p each.

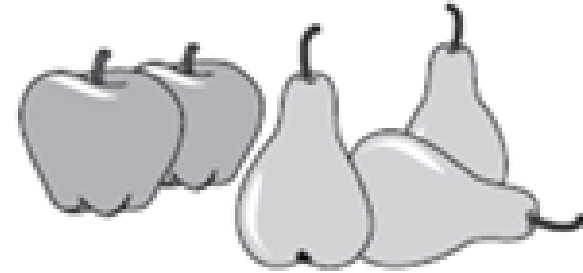
How much does **one** pear cost?

What will my answer look like?

£ / p

Seb bought 2 apples and 3 pears.

He spent £1.59 altogether.



Apples cost 24p each.

How much does **one** pear cost?

£1.59

A

A

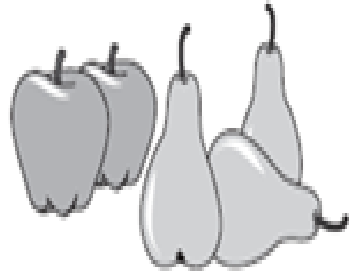
P

P

P

Seb bought 2 apples and 3 pears.

He spent £1.59 altogether.



$$£1.59 - 48p = £1.11$$

$$111 / 3$$

Apples cost 24p each.

How much does **one** pear cost?

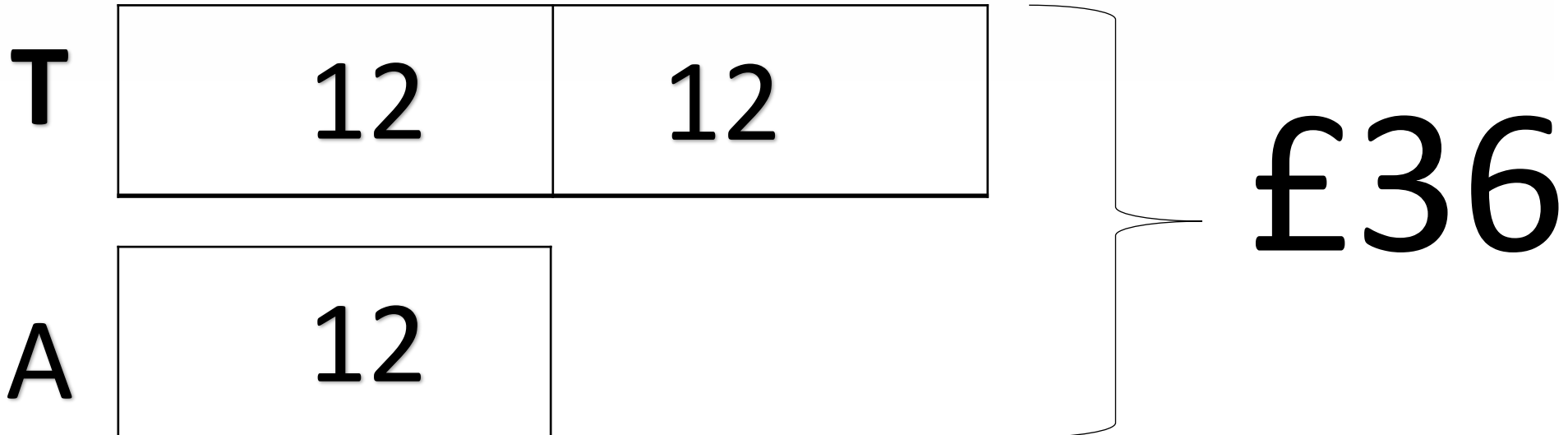
£1.59				
A	A	P	P	P
24p	24p			

Tom and Aisha have £36 between them.

Tom has twice as much money as Aisha.

Tom shares his money between 6 friends.

How much does each friend get?



Tom and Aisha have £36 between them.

Tom has twice as much money as Aisha.

Tom shares his money between 6 friends.

How much does each friend get?

T

12	12
----	----

£24

$$\text{£24} \div 6 \text{ friends} = \text{£4}$$

Using what
you know

A class votes for a captain.

Three-quarters of the class vote for Sam.

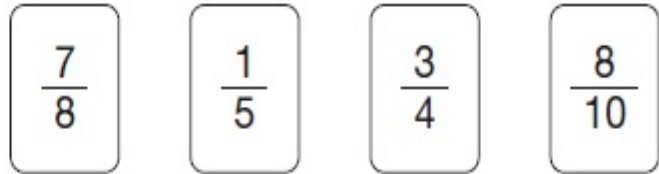
The remaining 7 pupils vote for Alex.

How many pupils are in the class?



Types of fraction questions on reasoning papers

Here are four fractions.



Write the fractions in order starting with the least.



least

Accept equivalent fractions or exact equivalent decimals.

$\frac{1}{2} \times \frac{5}{6}$ is greater than the value of $\frac{1}{3} \times \frac{7}{8}$

Explain how you know.

$\frac{6}{5}$ $\frac{3}{5}$ $\frac{3}{4}$

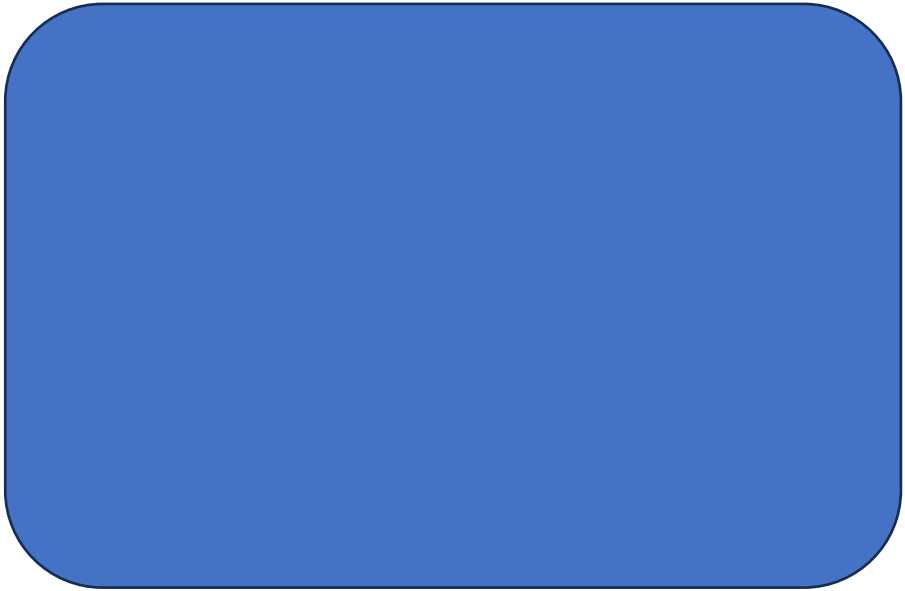
Write these fractions in order, starting with the smallest.



smallest

Don't overcomplicate

95% of 180 =

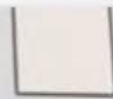


'DRAW IT' - MARK MAKING MATTERS

- 10** Rosie wants to work out $102 - 98$ in her head.
Explain a method that Rosie could use.



2 marks



1 mark



1 mark

How to support your child at home...

- Little and often
- Purchase CGP (check with your child's teacher as we may be using some of the CGP books in school)
- Corbett Maths Website
 - Videos and questions

