

Y5 and Y6 Maths Workshop

Tuesday 13th January 2026

Thursday 15th January 2026

Step 1

To work out 34×28 :

$$\begin{array}{r} 34 \\ 28 \times \\ \hline 2 \\ 3 \end{array}$$

$4 \times 8 = 32$

Step 2

$$\begin{array}{r} 34 \\ 28 \times \\ \hline 278 \\ 23 \end{array}$$

$3 \times 8 = 24$

$4 + 3 = 7$
Don't forget to add the 3 we carried last time.

Step 3

$$\begin{array}{r} 34 \\ 28 \times \\ \hline 278 \\ 0 \end{array}$$

Move to the next row.
Add a zero because we are now multiplying the tens digit,

Step 6

Finally, add columns

$$\begin{array}{r} 34 \\ 28 \times \\ \hline 278 \\ 680 \\ \hline 958 \\ 1 \end{array}$$

$34 \times 28 = 958$

Step 5

$$\begin{array}{r} 34 \\ 28 \times \\ \hline 278 \\ 680 \end{array}$$

$3 \times 2 = 6$

Step 4

$$\begin{array}{r} 34 \\ 28 \times \\ \hline 278 \\ 80 \end{array}$$

$2 \times 4 = 8$

Long division

432 ÷ 15 becomes

$$\begin{array}{r} 28 \\ 15 \overline{) 432} \\ \underline{300} \quad 15 \times 20 \\ 132 \\ \underline{120} \quad 15 \times 8 \\ 12 \end{array}$$

$$\frac{\cancel{12}}{\cancel{15}} = \frac{4}{5}$$

Answer: $28 \frac{4}{5}$

[Year 6 - Long division chunking method](#)

[How to do long division using chunking method](#)

Long Division- Chunking Method

1)

$$264 \div 12 =$$

Lay out the calculation using the bus stop method:

| | | | | |
|---|---|---|---|---|
| | | | | |
| | | | | |
| 1 | 2 | 2 | 6 | 4 |
| | | | | |
| | | | | |

Write out the multiples of the number

$$1 - 12$$

$$2 - 24$$

$$3 - 36$$

2)

Next, we're going to subtract a multiple of the divisor (the number outside the bus stop). In this example, we have subtracted 120 (which is 10×12) from 264. We write 120 below 264 and complete the subtraction leaving an answer of 144. At the side of the calculation, we write the number of divisors we have subtracted (in this case 10 lots of 12 or 10×12).

| | | | | |
|---|---|---|---|---|
| | | | | |
| | | | | |
| 1 | 2 | 2 | 6 | 4 |
| | - | 1 | 2 | 0 |
| | | 1 | 4 | 4 |
| | | | | |

(10 × 12)

3)

We are still left with 144 so we can subtract another 'chunk' – or group – of 12. Let's subtract 120 again and write the multiplication by the side.

| | | | | |
|---|---|---|---|---|
| | | | | |
| | | | | |
| 1 | 2 | 2 | 6 | 4 |
| | - | 1 | 2 | 0 |
| | | 1 | 4 | 4 |
| | - | 1 | 2 | 0 |
| | | | 2 | 4 |

(10 × 12)
(10 × 12)

4)

We are now left with 24. Let's think of another group ('chunk') of 12s that we can subtract. We can now subtract 24 (which is 2×12).

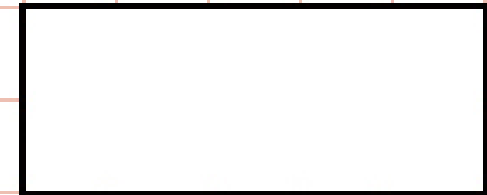
| | | | | |
|---|---|---|---|---|
| | | | | |
| | | | | |
| 1 | 2 | 2 | 6 | 4 |
| | - | 1 | 2 | 0 |
| | | 1 | 4 | 4 |
| | - | 1 | 2 | 0 |
| | | | 2 | 4 |
| | - | | 2 | 4 |
| | | | | 0 |

(10 × 12)
(10 × 12)
(2 × 12)

We cannot subtract any more 12s as the answer is 0. We now need to calculate the total amount of 12s we subtracted from 264. We used one group of 10 twelves, another group of 10 and a group of 2 twelves ($10 + 10 + 2$). Altogether, we subtracted 22 twelves from 264. Therefore, $264 \div 12 = 22$.

2 6 4 4 7 2

Show
your
method



2 marks

Numerator and Denominator



$$\frac{3}{4}$$

Numerator

How many equal parts do you have?

Denominator

How many equal parts is whole divided into?



$$\frac{1}{3}$$




$$\frac{2}{5}$$



$$\frac{5}{8}$$

Multiplying Fractions (Y6)

When multiplying fractions, multiply the numerators.
Then multiply the denominators.

| STEP 1 | STEP 2 | STEP 3 | |
|----------------------------------|-----------------------------------|------------------|--|
| $\frac{3}{4} \times \frac{2}{5}$ | $= \frac{3 \times 2}{4 \times 5}$ | $= \frac{6}{20}$ | Simplify?  |

Multiplying a fraction by a whole number is the same as calculating a fraction of the amount.

$$\frac{3}{4} \times 36$$

$$\frac{3}{4} \text{ of } 36$$

Divide by the denominator then multiply by the numerator

$$36 \div 4 = 9 \times 3 = 27$$

$$\left(\frac{3}{4} \text{ of } 36 = 27 \right)$$

Multiplying a fraction by a whole number can also be calculated by multiplying the numerator by the whole number.

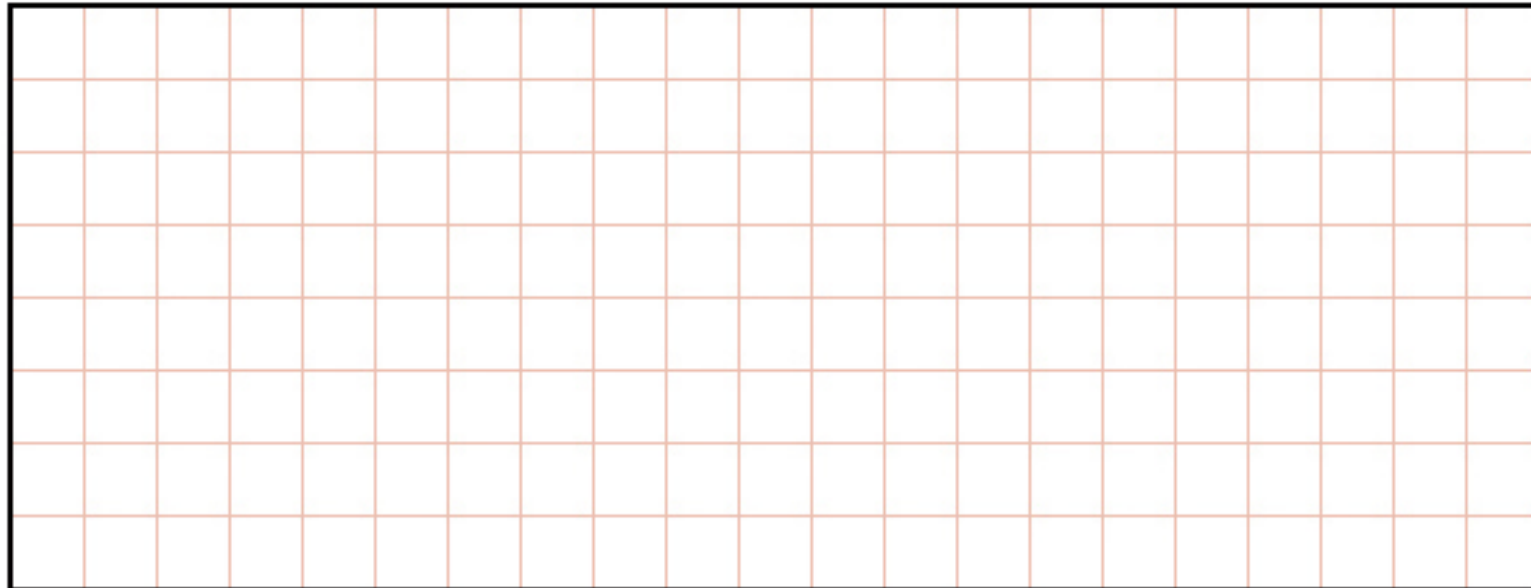
$$\frac{5}{8} \times 12$$

$$5 \times 12 = 60 \quad \frac{60}{8} = 7 \frac{4}{8}$$

Dividing Fractions (Y6)

Type 1 – Divide the numerator by the whole number if possible

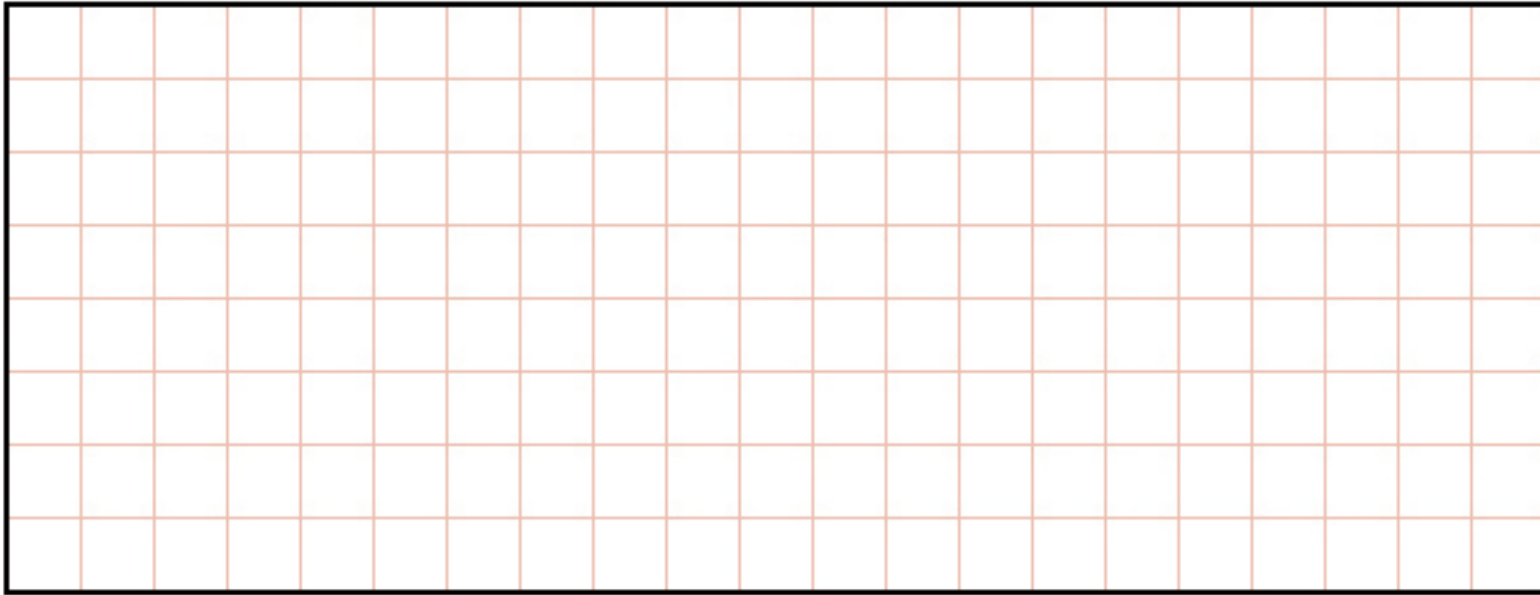
$$\frac{4}{5} \div 4 =$$



1 mark

Type 2 – If the numerator is 1 (unit fraction), multiply the denominator by the whole number

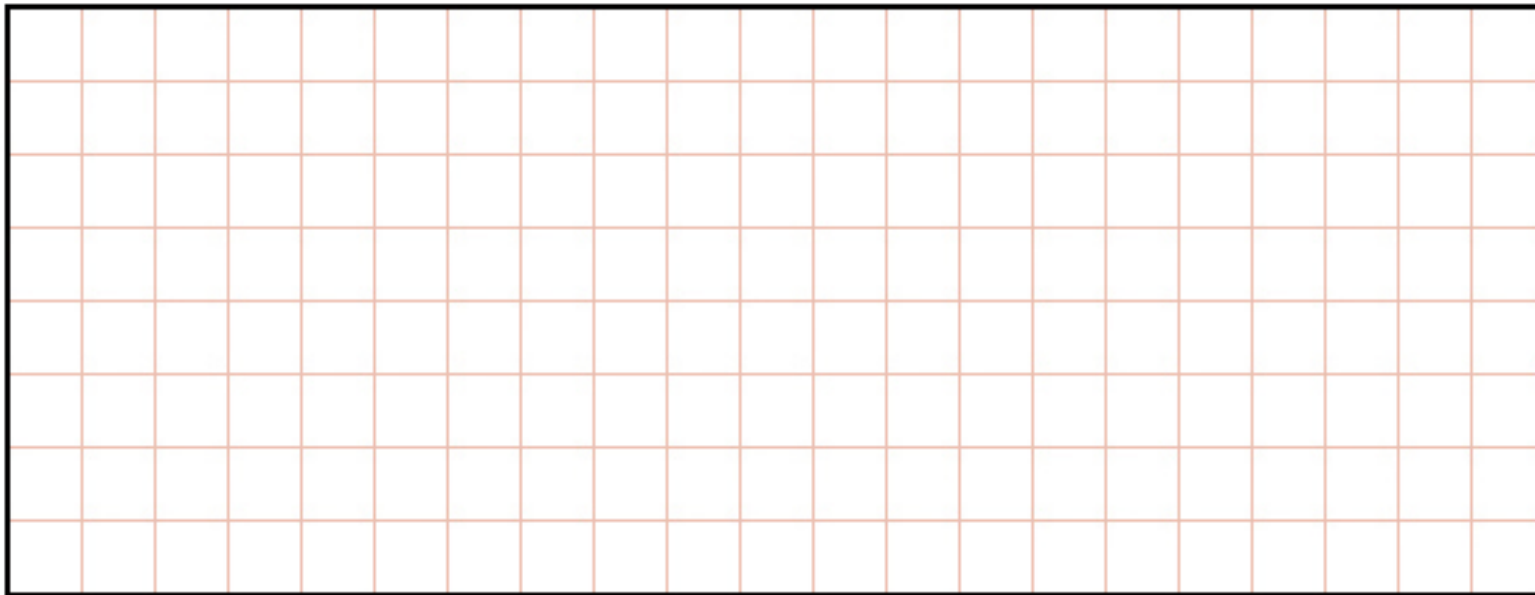
$$\frac{1}{2} \div 3 =$$



1 mark

Type 3 – Like the previous question, multiply the denominator by the whole number and keep the numerator the same.

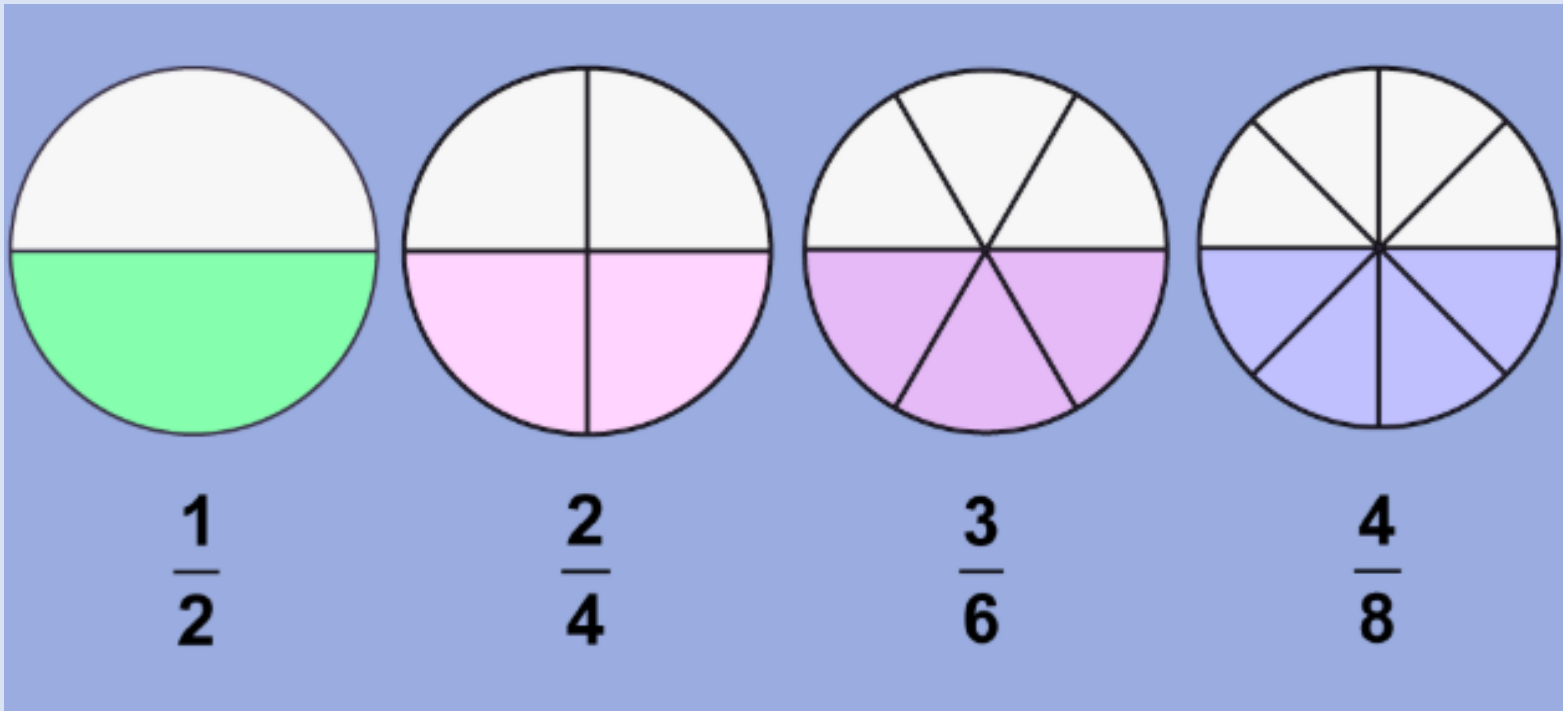
$$\frac{7}{10} \div 2 =$$



1 mark

Fraction Equivalence

Fractions that are equivalent have the same value.



Making fractions equivalent – burger method

Whatever you do
to the top

You must do
to the bottom

$$\frac{2}{5} = \frac{4}{10}$$

Making fractions equivalent is vital to comparing, ordering, adding and subtracting fractions.

$$\frac{6}{5}$$

$$\frac{3}{5}$$

$$\frac{3}{4}$$

Write these fractions in order, starting with the **smallest**.

smallest

1 mark

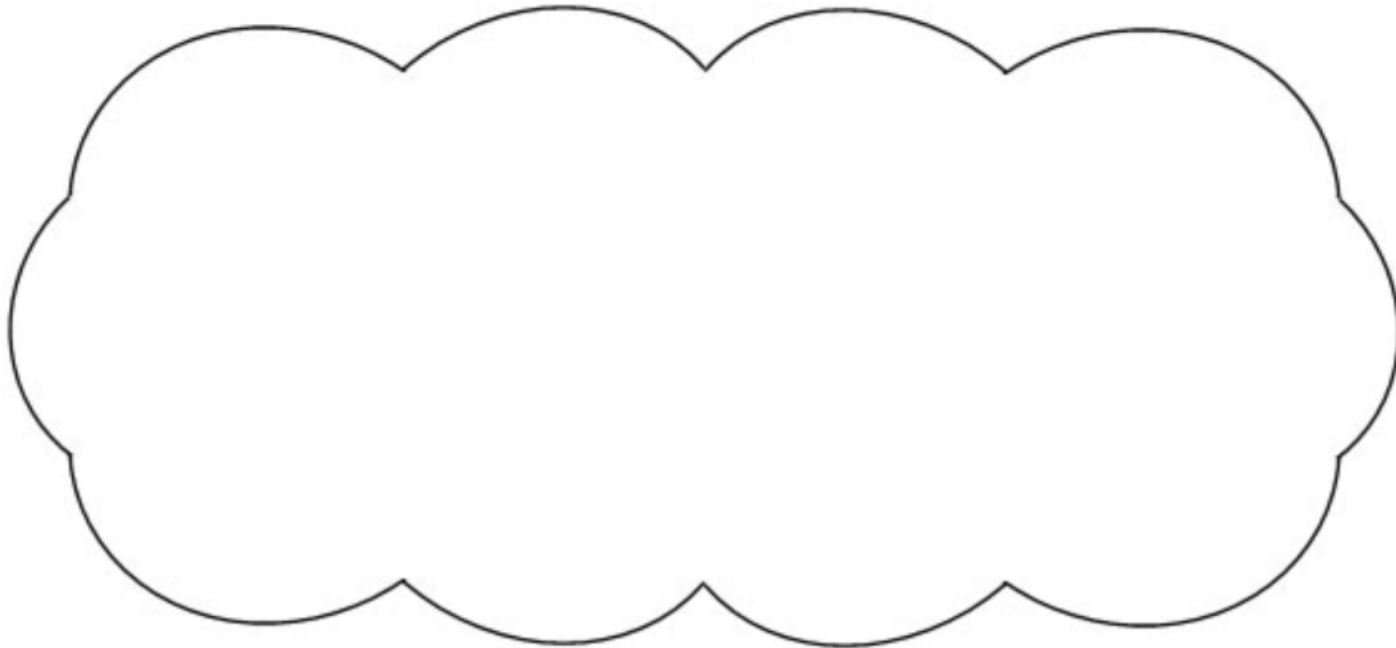
Sabijah and Will are in a running race.

Sabijah has run $\frac{9}{10}$ of the race.

Will has run $\frac{8}{9}$ of the race.

Who is further ahead?

Explain your reasoning.



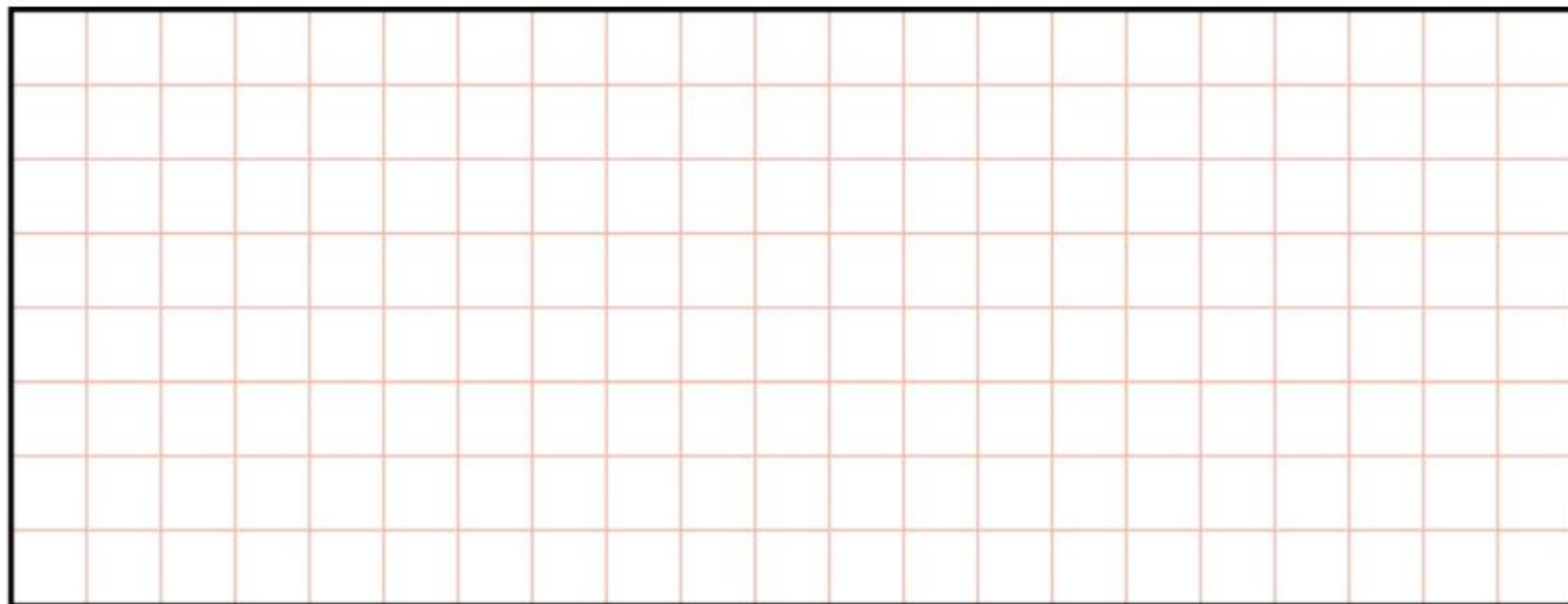
1 mark

$$\frac{1}{6} + \frac{2}{3} + \frac{3}{12} = \boxed{}$$

A large grid for working out the solution to the fraction addition problem. The grid is 18 columns wide and 10 rows high, with a black border and light red grid lines.

1 mark

$$\frac{1}{3} - \frac{1}{9} =$$



1 mark

