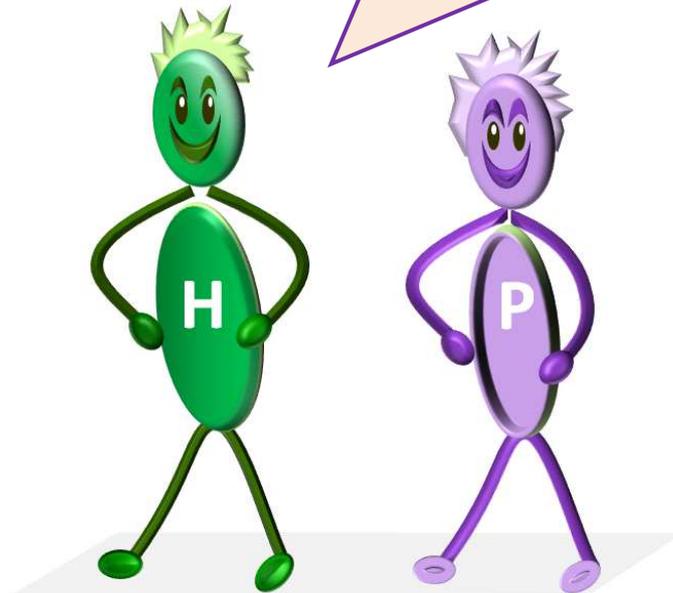


Henry and Poppy
have fun with numbers

Year 6 maths part 1

(for 10-11 year olds)

We had fun making these questions
for you. Enjoy them.



- 1 The world's highest mountain is 885,000 cm
A smaller mountain is 25,000 cm less



How high is the smaller mountain

cm



1 mark

The distance to the moon is 384, million metres



Not to
scale



Write the number that is one hundred thousand less
than 384 million

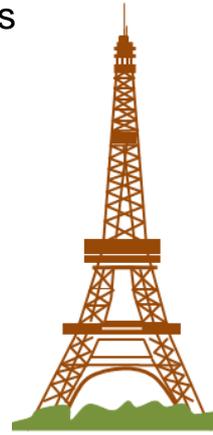


1 mark

6N2: Read, write, order and compare numbers up to 10,000,000

2

The Eiffel Tower cost 7,799,401 French Francs to build



What is 7,799,401 in words

What is half a million less than 7,799,401



1 mark



1 mark

6N2: Read, write, order and compare numbers up to 10,000,000

3

Write these numbers in words

1,123,456



1 mark

1,654,321



9,801,010



1 mark

9,009,009



1 mark

6N2: Read, write, order and compare numbers up to 10,000,000

4

Sort these numbers in order, highest at the top

123,456 102,345 120,456 122,345 123,056



1 mark

6N2: Read, write, order and compare numbers up to 10,000,000

5

Write the correct sign. Choose from $>$, $<$ or $=$

109,000 100,900

119,009 191,900

1,000,000 one hundred thousand

1,999,999 999,999



1 mark

6N2: Read, write, order and compare numbers up to 10,000,000

6

Sort these numbers in order, highest at the top

1,234,567 1,023,456 1,204,569 12,234,500 1,230,560



1 mark

6N2: Read, write, order and compare numbers up to 10,000,000

1 Look at this number

12, 345, 678

What value does the 3 represent in this number

1 mark

What value does the 2 represent in this number

Write eight million, nine hundred and twenty six thousand, three hundred and forty six as a number

1 mark

6N3: Determine the value of each digit in numbers up to 10,000,000

2 Look at this number

9, 102, 659

What value does the 0 represent in this number



1 mark

What value does the 2 represent in this number



Write seven million, fifty six thousand and twenty six as a number



1 mark

6N3: Determine the value of each digit in numbers up to 10,000,000

3 Look at this number

7, 031, 529

What value does the 0 represent in this number



1 mark

What value does the 1 represent in this number



Write four million, two thousand and nine as a number

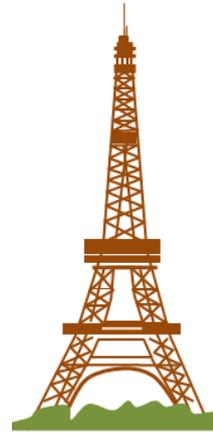


1 mark

6N3: Determine the value of each digit in numbers up to 10,000,000

1 The Eiffel Tower is 32, 400 cm high.

It cost 7,799,401 French Francs to build



What is **32, 400 cm** when **rounded**

to the **nearest 10 000**

cm

to the **nearest 1 000**

cm

What **7,799,401** when **rounded**

to the **nearest 100 000**

cm

to the **nearest 10 000**

cm



1 mark



1 mark



1 mark



1 mark

6N4: Round any whole number to a required degree of accuracy

2 Look at these number

123,050

124, 099

123, 999

123, 399

Tick all the numbers which are **123, 000** when **rounded** to the **nearest 1,000**

1 mark

What is **358, 287** when **rounded**

to the **nearest 100, 000**

to the **nearest 10,000**

2 marks

6N4: Round any whole number to a required degree of accuracy

3 Look at these number

124,050

125,099

131,499

134,490

Tick all the numbers which are **130,000** when
rounded to the **nearest 10,000**

What is **488,587** when **rounded**

to the **nearest 1,000**

to the **nearest 100,000**

1 mark

2 marks

6N4: Round any whole number to a required degree of accuracy

4

Look at these number

154,050

145, 099

231,450

204,999

Tick all the numbers which are **200,000** when **rounded** to the **nearest 100,000**

What is **1,588,587** when **rounded**

to the **nearest 100**

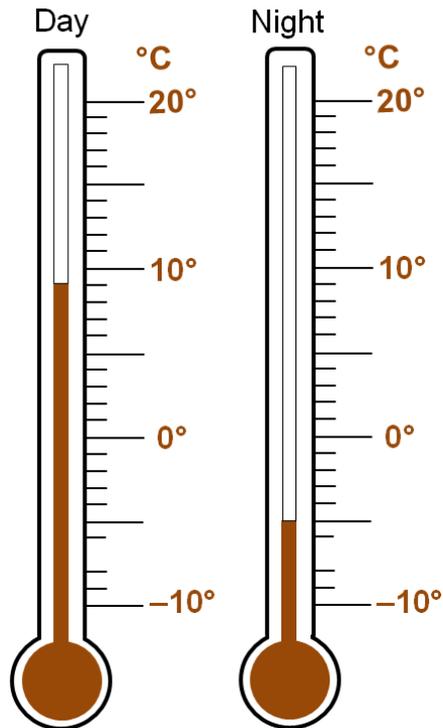
to the **nearest 1,000,000**

1 mark

2 marks

6N4: Round any whole number to a required degree of accuracy

1 The thermometers show the temperature at day and night.



What is the difference between the two temperatures?

 °C

1 mark

Yesterday the temperature was 2 degrees lower at night.

What was the temperature at night yesterday?

 °C

1 mark

Ref: 6N5 Use negative numbers in context, and calculate intervals across zero

2 The channel tunnel is 250 feet below sea level.

The Seikan Tunnel in Japan is 540 feet deeper.



How deep is the Seikan Tunnel

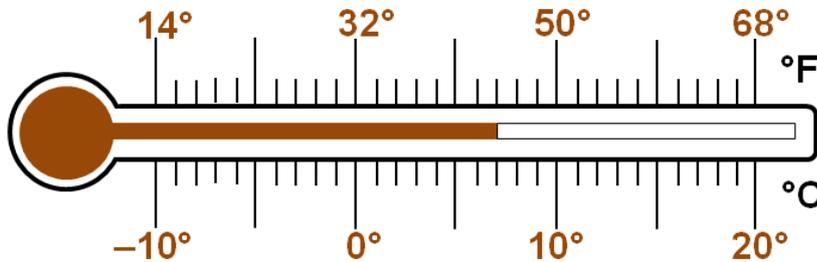
feet



1 mark

Ref: 6N5 Use negative numbers in context, and calculate intervals across zero

3 The temperature today is shown on the thermometer.



Yesterday the temperature was 12°C colder.
What was the temperature yesterday in °C and °F

°C

°F



1 mark

Ref: 6N5 Use negative numbers in context, and calculate intervals across zero

4

Write the missing numbers.
The first one has been done

halfway
between

-1	0	1
-2		4
	3	8
-4	3	



1 mark



1 mark



1 mark

Ref: 6N5 Use negative numbers in context, and calculate intervals across zero

1

Tick two numbers which multiply to make 600, 000

20

200

300

2,000

3,000

1 mark

Ref: 6N6 Solve number problems and practical problems that involve 6N2-6N5

2

Round the numbers to the nearest ten to estimate

$29.6 \times 9.87 =$

1 mark

$52.3 \div 4.98 =$

1 mark

$1596 \div 35.9 =$

1 mark

$75.9 \times 45.9 =$

1 mark

Ref: 6N6 Solve number problems and practical problems that involve 6N2-6N5

3

The Mariana Trench is the deepest part of the world's oceans. It is 11,0344 metres deep.

Mount Everest is the world's highest mountain.
It 8,848 metres high.

How far is it between the bottom of the Mariana Trench and the top of Mount Everest.

m



1 mark

Ref: 6N6 Solve number problems and practical problems that involve 6N2-6N5

1 What is 15.1×19.6

Estimate and tick the correct answer

280

350

300

3,000

1519



1 mark

Ref: 6C3 Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

2 What is $149 \div 9.8$

Estimate and tick the correct answer

1500

150

1499

149

15



1 mark

Ref: 6C3 Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

3 What is 550×9.9

Estimate and tick the correct answer

Between

500 – 1000

Between

1000 – 5000

Between

5000 – 9000



1 mark

Ref: 6C3 Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

4 What is $800 \times 12 \div 3$

Estimate and tick the correct answer

Between

2000 – 3000

Between

3000 – 4000

Between

4000 – 5000



1 mark

Ref: 6C3 Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

5

What is $4.8 \times 50 \div 2.4$

Estimate and tick the correct answer

Between

100 – 200

Between

200 – 300

Between

400 – 500



1 mark

Ref: 6C3 Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy

1

Write all the common multiples of 2 and 9 that are less than 40



1 mark

Ref: 6C5 Identify common factors, common multiples and prime numbers

2

Write all the common factors of 18 and 42



1 mark

Ref: 6C5 Identify common factors, common multiples and prime numbers

3

Write the numbers from 20 to 30 in their correct place on the diagram.

	Multiple of 3	NOT multiple of 3
Prime		
Not prime		



2 marks

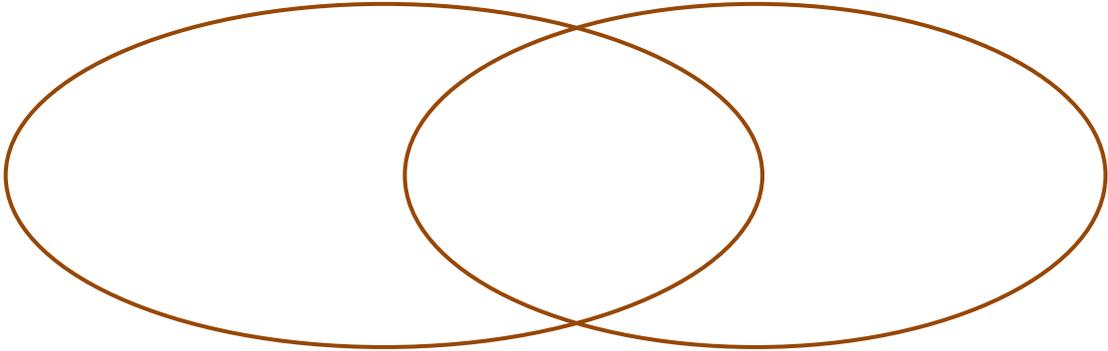
Ref: 6C5 Identify common factors, common multiples and prime numbers

4

Write the factors of 24 and 30 and their common factors on the diagram.

Factors of 24

Factors of 30



2 marks

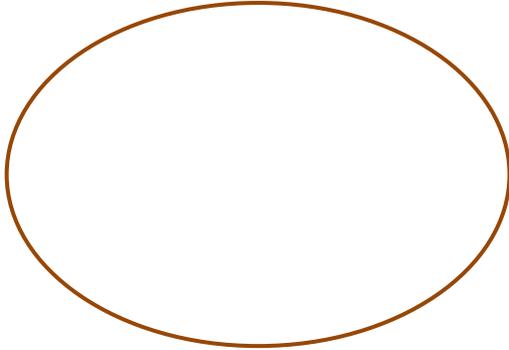
Ref: 6C5 Identify common factors, common multiples and prime numbers

5

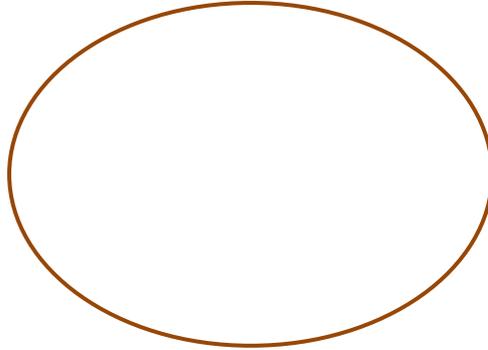
Sort these numbers into Prime and Not prime.

9 13 8 5 16 7 15 19

Prime



Not prime

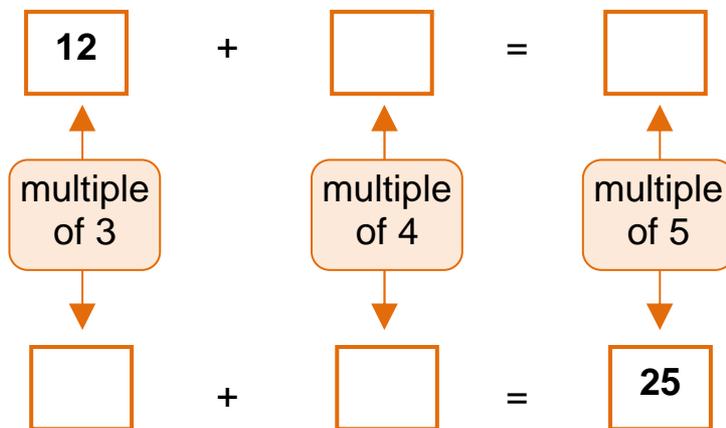


2 marks

Ref: 6C5 Identify common factors, common multiples and prime numbers

6

Write multiples to make these additions correct

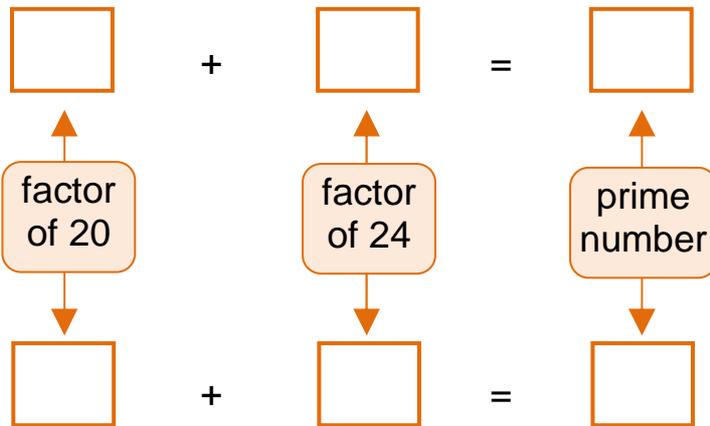


2 marks

Ref: 6C5 Identify common factors, common multiples and prime numbers

7

Write factors and a prime number to make these



2 marks

Ref: 6C5 Identify common factors, common multiples and prime numbers

1

$240 \div 5 =$

1 mark

$340 \times 5 =$

1 mark

$248 \div 8 =$

1 mark

Ref: 6C6 Perform mental calculations, including with mixed operations and large numbers

4

99% of 500 =

1 mark

$32 \times 0.75 =$

1 mark

44% of 25 =

1 mark

Ref: 6C6 Perform mental calculations, including with mixed operations and large numbers

5

Which calculation (✓) gives a different answer

$25\% \text{ of } 1200 =$

$16 \times 25 =$

$1200 \div 3 =$

$999 - 555 =$

$199 + 201 =$



1 mark

Ref: 6C6 Perform mental calculations, including with mixed operations and large numbers

6

Which calculations (✓) give a negative answer

$-1 \times -1 =$

$-1 + -1 =$

$-1 \div -1 =$

$-1 - -1 =$



1 mark

Ref: 6C6 Perform mental calculations, including with mixed operations and large numbers

1

$$420 \div 6 =$$

1 mark

$$1000 \div 8 =$$

1 mark

$$81 \times 3 \div 9 =$$

1 mark

Ref: 6C6 Perform mental calculations, including with mixed operations and large numbers

1	$\begin{array}{r} 4582 \\ \times 47 \\ \hline \end{array}$															<input type="text"/> 2 marks
	<div style="border: 1px solid #e67e22; width: 100px; height: 30px; margin: 0 auto;"></div>															
Show your method																
Ref: 6C7a Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication																

2	$\begin{array}{r} 76 \\ \times 24 \\ \hline \end{array}$															<input type="text"/> 2 marks
	<div style="border: 1px solid #e67e22; width: 100px; height: 30px; margin: 0 auto;"></div>															
Show your method																
Ref: 6C7a Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.																

1

Show
your
method

$$12 \overline{) 736}$$



2 marks

Ref: 6C7b Divide numbers up to 4 digits by a two-digit number using the formal written method of short division and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context

2

Show
your
method

$$14 \overline{) 861}$$



2 marks

Ref: 6C7b Divide numbers up to 4 digits by a two-digit number using the formal written method of short division and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context

4

Show
your
method

$$39 \overline{) 949}$$



2 marks

Ref: 6C7b Divide numbers up to 4 digits by a two-digit number using the formal written method of short division and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context

5

Show
your
method

$$37 \overline{) 1073}$$



2 marks

Ref: 6C7b Divide numbers up to 4 digits by a two-digit number using the formal written method of short division and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context

7

Show
your
method

1 7 9 0 1



2 marks

Ref: 6C7b Divide numbers up to 4 digits by a two-digit number using the formal written method of short division and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context

8

Show
your
method

2 9 1 3 6 3



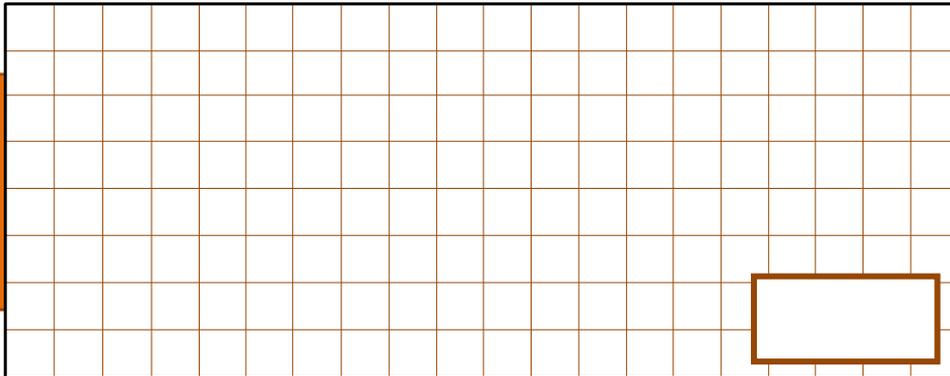
2 marks

Ref: 6C7b Divide numbers up to 4 digits by a two-digit number using the formal written method of short division and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context

1 Henry picks a number more than 50
He divides it by 6 and then adds 11
He then multiplies this result by 2.5
His answer is 50

What was the number he started with?

Show
your
Method



2 marks

Ref: 6C8: Solve problems involving addition, subtraction, multiplication and division

2 Write the missing number

$$\square \div 20 = 2.5$$



1 mark

Ref: 6C8 Solve problems involving addition, subtraction, multiplication and division

1

Write the two missing digits to make these equivalent fractions correct.

$$\frac{\square}{3} = \frac{8}{12} = \frac{6}{\square}$$



2 marks

Ref: 6F2 Use common factors to simplify fractions; use common multiples to express fractions in the same denomination

2

Write the two missing digits to make these equivalent fractions correct.

$$\frac{\square}{50} = \frac{70}{100} = \frac{14}{\square}$$



2 marks

Ref: 6F2 Use common factors to simplify fractions; use common multiples to express fractions in the same denomination

3

Write these fractions in their simplest form.

$$\frac{15}{50} = \frac{\square}{\square}$$

$$\frac{27}{90} = \frac{\square}{\square}$$



2 marks

Ref: 6F2 Use common factors to simplify fractions; use common multiples to express fractions in the same denomination

4

Write these fractions in their simplest form.

$$\frac{48}{80} = \frac{\square}{\square}$$

$$\frac{36}{60} = \frac{\square}{\square}$$



2 marks

Ref: 6F2 Use common factors to simplify fractions; use common multiples to express fractions in the same denomination

1

Order these fractions starting with the smallest

$$\frac{9}{16}$$

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

$$\frac{7}{32}$$

$$\frac{1}{4}$$

smallest



1 mark

Ref: 6F3: Compare and order fractions, including fractions >1

2

Order these fractions starting with the smallest

$$1\frac{3}{4}$$

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

$$1\frac{5}{6}$$

$$1\frac{5}{8}$$

$$1\frac{7}{12}$$

smallest



1 mark

Ref: 6F3: Compare and order fractions, including fractions >1

3

Order these fractions starting with the smallest

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

$$\frac{7}{4}$$

$$\frac{17}{12}$$

$$\frac{13}{8}$$

$$\frac{9}{6}$$

smallest

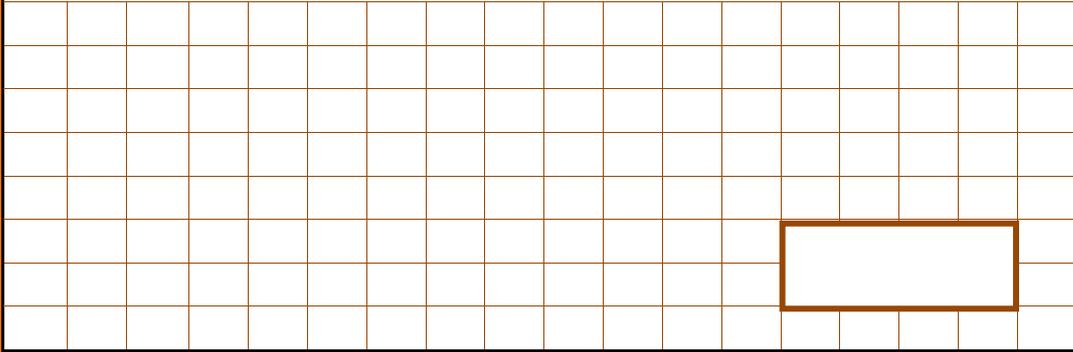


1 mark

Ref: 6F3: Compare and order fractions, including fractions >1

1

$$1\frac{3}{5} + \frac{3}{4} =$$

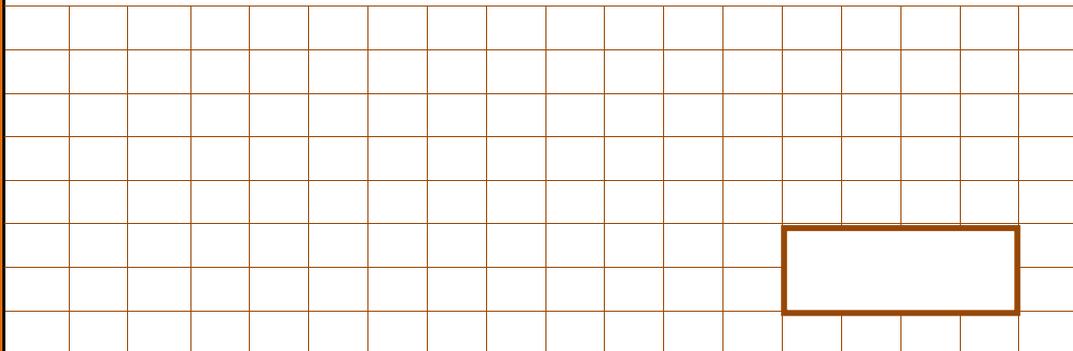


1 mark

Ref: 6F4: Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

2

$$1\frac{4}{6} - 1\frac{1}{4} =$$



1 mark

Ref: 6F4: Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

3

$$\frac{3}{5} + \frac{2}{10} =$$



1 mark

Ref: 6F4: Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

4

$$\frac{3}{4} - \frac{5}{12} =$$

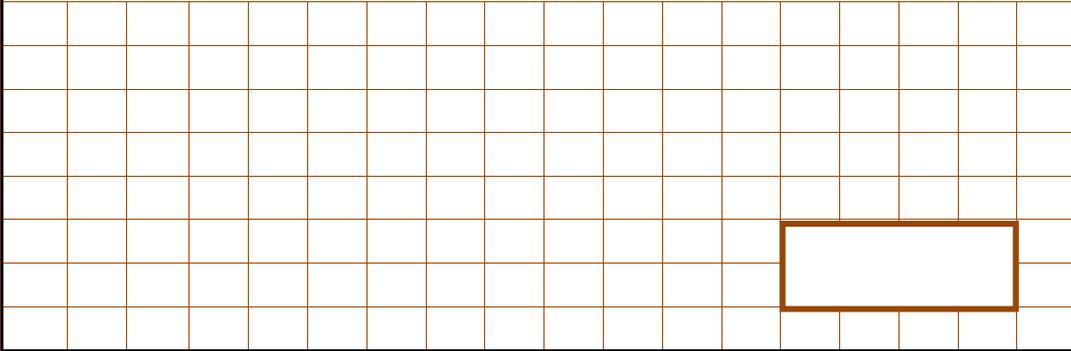


1 mark

Ref: 6F4: Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

1

$$\frac{1}{6} \times \frac{1}{2} =$$

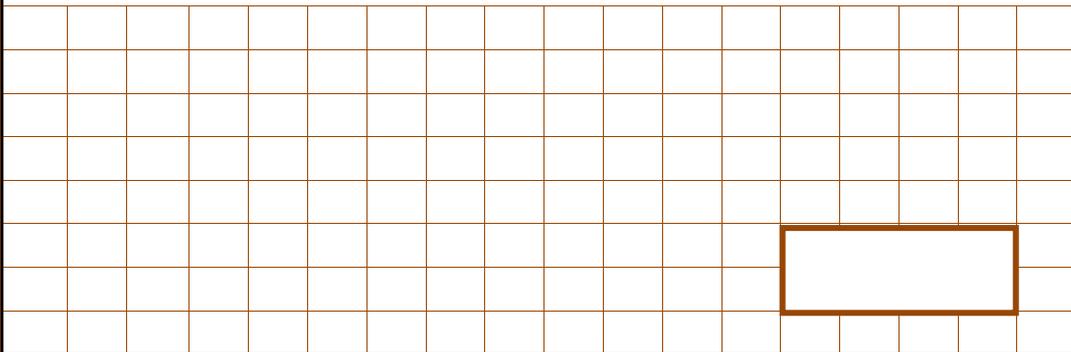


1 mark

Ref: 6F5a: Multiply simple pairs of proper fractions, writing the answer in its simplest form [eg: $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]

2

$$\frac{3}{4} \times \frac{1}{3} =$$



1 mark

Ref: 6F5a: Multiply simple pairs of proper fractions, writing the answer in its simplest form [eg: $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]

3

$$\frac{1}{5} \times \frac{1}{3} =$$



1 mark

Ref: 6F5a: Multiply simple pairs of proper fractions, writing the answer in its simplest form [eg: $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]

4

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



1 mark

Ref: 6F5a: Multiply simple pairs of proper fractions, writing the answer in its simplest form [eg: $\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}$]

1

$$\frac{4}{7} \div 2 =$$



1 mark

Ref: 6F5b: Divide proper fractions by whole numbers [eg: $\frac{1}{3} \div 2 = \frac{1}{6}$]

2

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



1 mark

Ref: 6F5b: Divide proper fractions by whole numbers [eg: $\frac{1}{3} \div 2 = \frac{1}{6}$]

3

$$65.4 \div 1000 =$$



1 mark

Ref: 6F9a: Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places

4

$$9.56 \times 100 =$$



1 mark

Ref: 6F9a Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places

5

$$1 \div 100 =$$



1 mark

Ref: 6F9a Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places

1

$$16 \times 4.2 =$$



1 mark

Ref: 6F9b Multiply one-digit numbers with up to two decimal places by whole numbers

2

$$2.64 \times 6 =$$



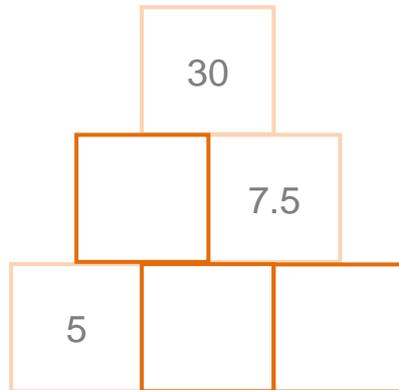
1 mark

Ref: 6F9b Multiply one-digit numbers with up to two decimal places by whole numbers

3 Look at the number pyramid

The number in a box is the product of the two numbers below it.

Write the missing numbers



2 marks

Ref: 6F9b: Multiply one-digit numbers with up to two decimal places by whole numbers

