1 Write the missing numbers.

One is done for you.

Improper fraction	Mixed number
$\frac{7}{4}$	$1\frac{3}{4}$
$\frac{\square}{2}$	$5\frac{1}{2}$
$\frac{17}{5}$	$3\frac{\square}{5}$

2 marks

2 How many quarters are there in $2\frac{3}{4}$?

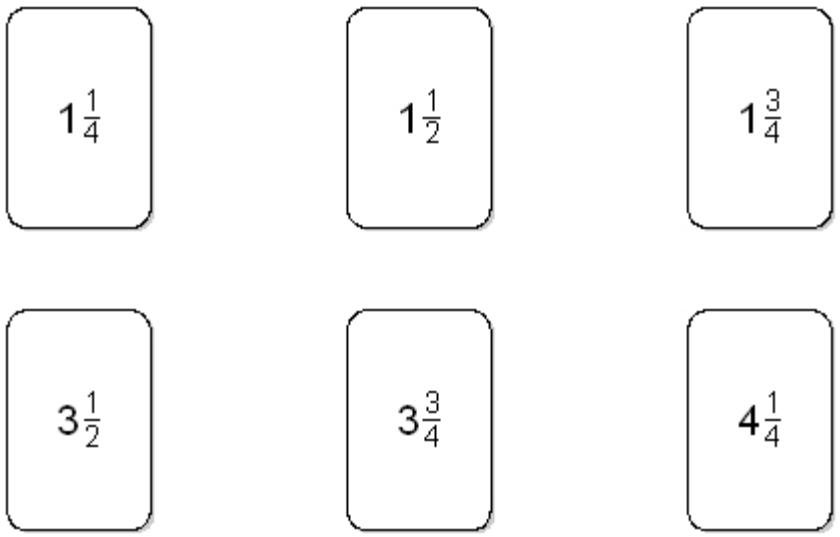
1 mark

3 Circle the improper fraction that is equivalent to $\mathbf{6\frac{7}{8}}$

$\frac{67}{8}$ $\frac{48}{8}$ $\frac{62}{8}$ $\frac{55}{8}$ $\frac{76}{8}$

1 mark

4 Tick (✓) **two** cards that give a **total of 5**

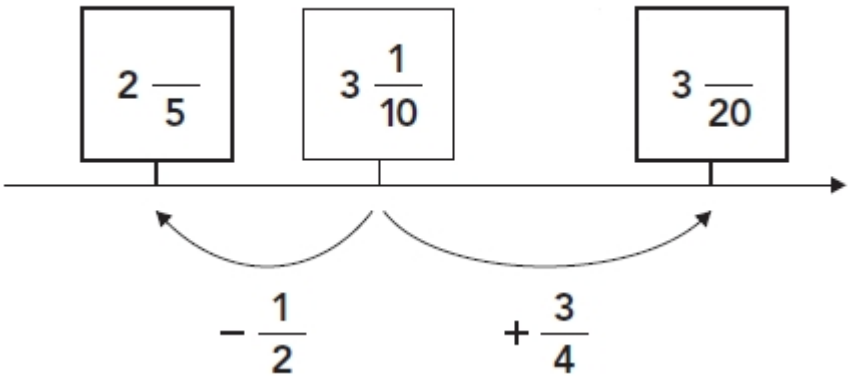


1 mark

5 The diagram shows part of a number line.

Two of the fractions are not complete.

Write the missing numerator in each box



2 marks

6 Layla wants to estimate the answer to this calculation.

$$3\frac{9}{10} - 2\frac{1}{8} + 1\frac{4}{5}$$

Tick the calculation below that is the best estimate.

Tick **one**

3 − 2 + 2	☐
4 − 2 + 1	☐
4 − 2 + 2	☐
3 − 2 + 1	☐

1 mark

7 Write these numbers in order, starting with the smallest.

$\frac{5}{4}$ $\frac{7}{6}$ $\frac{17}{12}$ $\frac{4}{3}$

☐ ☐ ☐ ☐

smallest largest

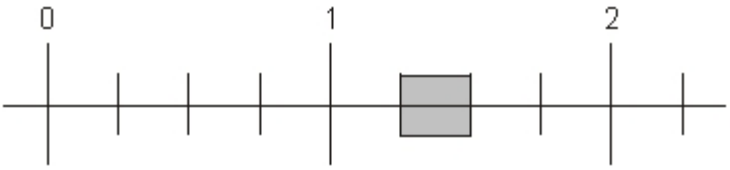
1 mark

8 What number is exactly halfway between $2\frac{3}{4}$ and $3\frac{1}{2}$

☐

1 mark

9 Part of this number line is shaded.



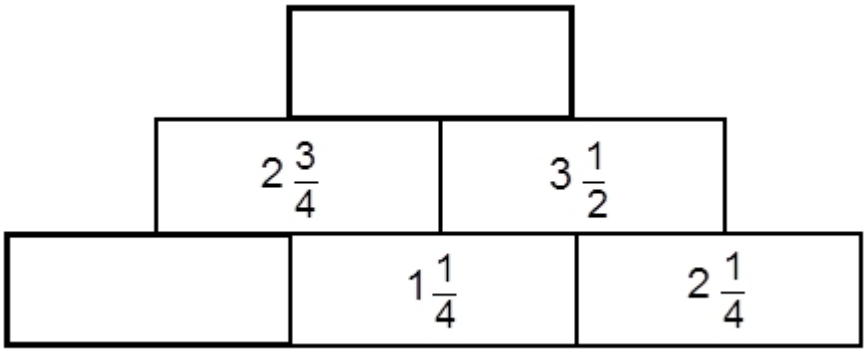
Circle **all** the numbers below that belong in the shaded part of the number line.

1.1 1.4 $1\frac{1}{3}$ $1\frac{1}{5}$

1 mark

10 In this diagram, the number in each box is the **sum** of the two numbers below it.

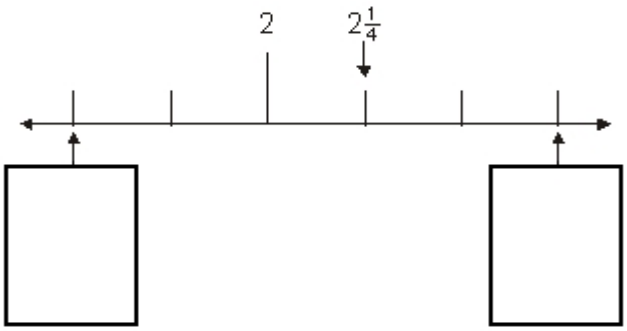
Write the missing numbers.



2 marks

11 Here is part of a number line.

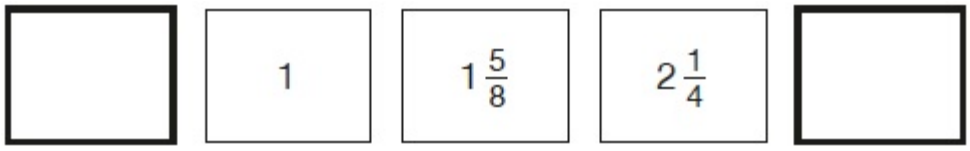
Write in the two missing numbers.



2 marks

12 The numbers in this sequence increase by the same amount each time.

Write the missing numbers.

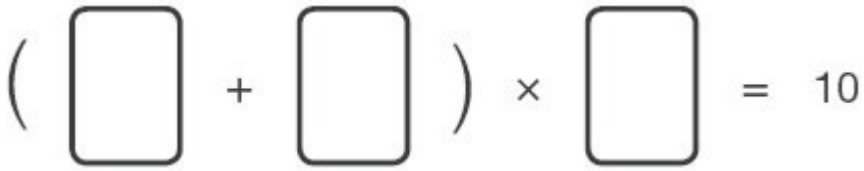


2 marks

13 Here are five number cards.



Use **three** of the number cards to make this calculation correct.

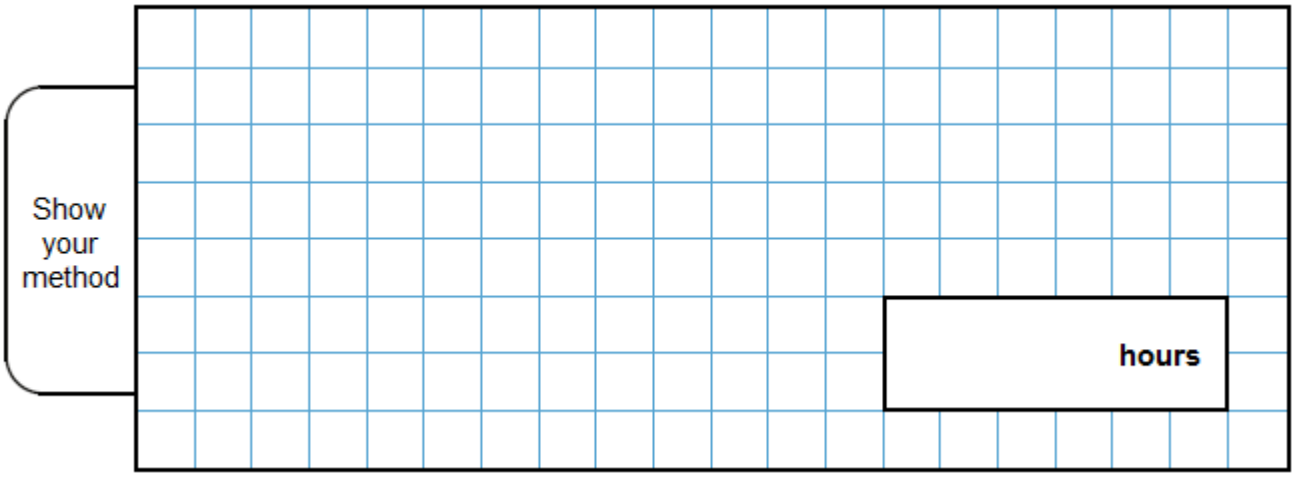


1 mark

14 The length of a day on Earth is 24 hours.

The length of a day on Mercury is $58\frac{2}{3}$ times the length of a day on Earth.

What is the length of a day on Mercury, in **hours**?



2 marks

Mark schemes

1

$\frac{11}{2}$ **1**

$3\frac{2}{5}$ **1**

[2]

2 11 quarters

[1]

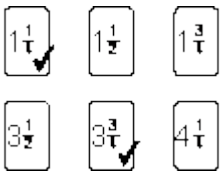
3 Correct number circled, as shown:

$\frac{67}{8}$ $\frac{48}{8}$ $\frac{62}{8}$ $\frac{55}{8}$ $\frac{76}{8}$

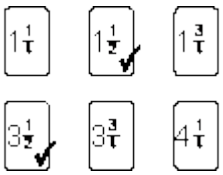
Accept alternative unambiguous positive indication of the correct answer, e.g. fraction ticked.

[1]

4 Two cards ticked as shown:



OR



Accept alternative unambiguous indications such as circling or a line joining a correct pair of cards.

[1]

5 Completes both fractions correctly, ie



2

or

Completes one of the fractions correctly

OR

Shows both correct values, even if they are not fractions in their simplest forms, eg

- $2\frac{6}{10}$ and 3.85 seen

1

[2]

6 Third box only ticked correctly, as shown:

3 − 2 + 2	☐
4 − 2 + 1	☐
4 − 2 + 2	✓
3 − 2 + 1	☐

Accept alternative unambiguous positive indication of the correct answer, e.g. Y.

[1]

7 $\frac{7}{6}$ $\frac{5}{4}$ $\frac{4}{3}$ $\frac{17}{12}$

Accept equivalent, e.g. $\frac{14}{12}$ $\frac{15}{12}$ $\frac{16}{12}$ $\frac{17}{12}$

[1]

8 $3\frac{1}{8}$

Accept equivalent fractions/decimals, e.g. $\frac{25}{8}$ *or 3.125*

[1]

9 Two numbers circled as shown:

1.1 (1.4) ($1\frac{1}{3}$) $1\frac{1}{5}$

***Do not** award the mark if additional incorrect numbers are circled.*

Accept: alternative unambiguous indications, eg numbers ticked, crossed or underlined.

[1]

10 (a) $6\frac{1}{4}$

Accept equivalent fractions.

***Do not** accept* $5\frac{5}{4}$

1

(b) $1\frac{1}{2}$

Accept equivalent fractions, eg

$1\frac{2}{4}$, $\frac{3}{2}$, *1.5, 150%*

1

[2]

11 (a) $1\frac{1}{2}$ in the first box

Accept equivalent fractions or decimals, eg 1.5

1

(b) $2\frac{3}{4}$ in the second box

Accept equivalent fractions or decimals, eg 2.75

1

[2]

12

(a) $\frac{3}{8}$ written in the first box

1

*Accept equivalent fractions or an **exact** decimal equivalent, e.g. 0.375*

(b) $2\frac{7}{8}$ **OR** $\frac{23}{8}$ written in the last box

1

*Accept equivalent fractions or an **exact** decimal equivalent, e.g. 2.875*

[2]

13

$\left(\boxed{1\frac{1}{2}} + \boxed{3\frac{1}{2}} \right) \times \boxed{2}$

OR

$\left(\boxed{\frac{1}{2}} + \boxed{3\frac{1}{2}} \right) \times \boxed{2\frac{1}{2}}$

Numbers in brackets may be given in either order.

Accept equivalent fractions or decimals.

***Do not** accept use of the same card twice, eg*

$\left(\boxed{2\frac{1}{2}} + \boxed{2\frac{1}{2}} \right) \times \boxed{2}$

[1]

14

Award **TWO** marks for the correct answer of 1,408

OR

for an answer in the range of 1,406 to 1,409 inclusive.

If the answer is incorrect, award **ONE** mark for:

- sight of 1,392

OR

- evidence of an appropriate method, e.g.
  - $24 \times 58\frac{2}{3}$ = answer

    Within an appropriate method, if a decimal equivalent for $\frac{2}{3}$ is given, it must be rounded or truncated to at least 2 decimal places.

  - 24 × 58 = 1,394 *(error)*
    $\frac{2}{3}$ of 24 = 16
    1,394 + 16 = answer
  - $24 \times \frac{176}{3}$ = answer
  - 24 × 58.67 = answer.

    *A final answer is required for the award of **ONE** mark.*

Up to 2m

[2]