

5.1

| | |
|----------------------------|--|
| Total Marks (out of 60) | |
|----------------------------|--|

| | |
|------|--|
| Name | |
| Date | |

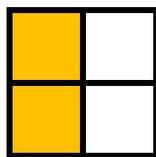
Section 1:

identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths

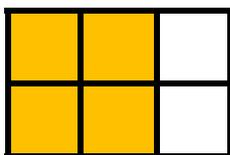
1 Here are some shapes made from squares. A fraction of each shape is shaded.

Match each shape to its equivalent fraction.

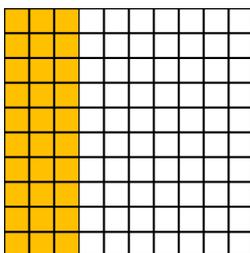
The first one has been done for you.



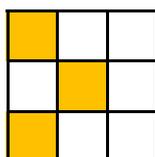
$$\frac{3}{10}$$



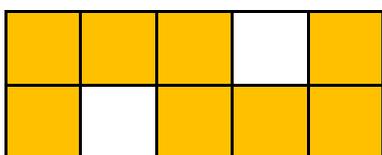
$$\frac{1}{2}$$



$$\frac{4}{5}$$

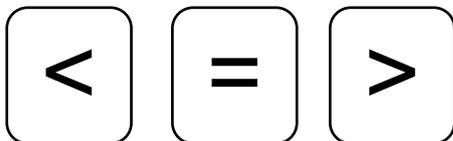


$$\frac{2}{3}$$



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

_____ 2 marks

Section 2:**compare and order fractions whose denominators are all multiples of the same number****2** Look at these signs.

Write the correct sign in each box.

$$\frac{1}{2} \quad \square \quad \frac{5}{10}$$

$$\frac{3}{10} \quad \square \quad \frac{28}{100}$$

$$\frac{4}{5} \quad \square \quad \frac{9}{10}$$

$$\frac{70}{100} \quad \square \quad \frac{7}{10}$$

$$\frac{22}{30} \quad \square \quad \frac{2}{3}$$

$$\frac{4}{5} \quad \square \quad \frac{39}{50}$$

6 marks

3

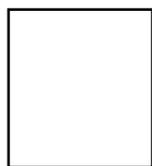
Write these fractions in order, starting with the smallest.

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

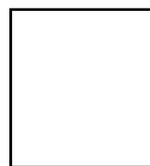
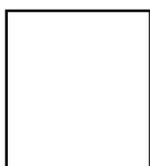
$$\frac{1}{8}$$

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

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



smallest



2 marks

4

Draw lines to show the positions of the fractions on the number line.

The first one has been done for you.

$$\frac{3}{10}$$

$$\frac{1}{10}$$

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

$$\frac{70}{100}$$

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



4 marks

5

Write the fractions in the correct positions.

$$\frac{2}{6}$$

$$\frac{4}{9}$$

$$\frac{9}{30}$$

| less than $\frac{1}{3}$ | equal to $\frac{1}{3}$ | more than $\frac{1}{3}$ |
|-------------------------|------------------------|-------------------------|
| | | |

3 marks

Section 3:

- recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements > 1 as a mixed number
- add and subtract fractions with the same denominator and denominators that are multiples of the same number

6

Convert between **improper fractions** and **mixed numbers**.

| improper fraction | mixed number |
|-------------------|-----------------|
| $\frac{3}{2}$ | $1\frac{1}{2}$ |
| $\frac{7}{4}$ | |
| | $1\frac{2}{5}$ |
| $\frac{9}{2}$ | |
| | $1\frac{3}{10}$ |

4 marks

7

Write the answers as **mixed numbers**.

$$\frac{2}{3} + \frac{2}{3} = \boxed{}$$

$$\frac{7}{10} + \frac{6}{10} = \boxed{}$$

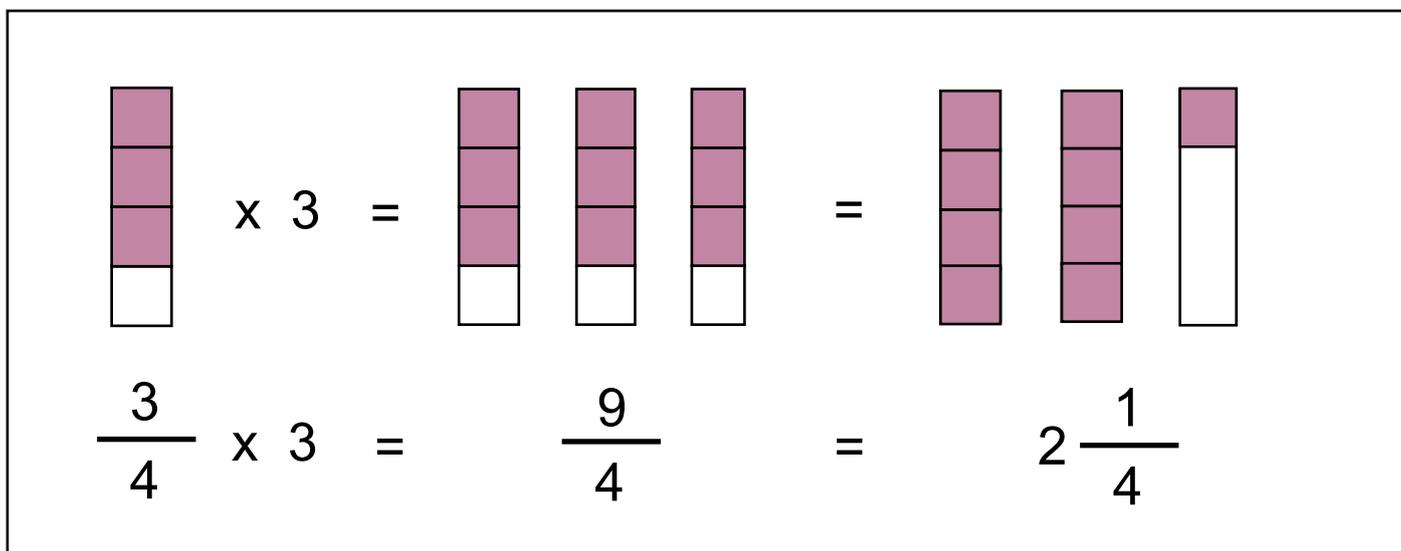
$$4 - \frac{1}{4} = \boxed{}$$

3 marks

Section 4:

multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams

This diagram shows $\frac{3}{4} \times 3$

**10**

Complete the table.

| | answers as an improper fraction | answer as a mixed number |
|-------------------------|---------------------------------|--------------------------|
| $\frac{3}{4} \times 3$ | $\frac{9}{4}$ | $2\frac{1}{4}$ |
| $\frac{2}{5} \times 3$ | | |
| $\frac{2}{3} \times 5$ | | |
| $\frac{9}{10} \times 4$ | | |

Section 5:

- read and write decimal numbers as fractions
- recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents
- solve problems involving number up to three decimal places

11

Convert between fractions and decimals.

| fraction | decimal |
|--------------------|---------|
| $\frac{1}{10}$ | 0.1 |
| $\frac{4}{100}$ | |
| $\frac{9}{1000}$ | |
| $\frac{23}{100}$ | |
| $\frac{345}{1000}$ | |
| $\frac{108}{100}$ | |

5 marks

12Circle the number closest in value to $\frac{4}{10}$

0.041

4.02

0.43

0.395

1 mark

13

Complete these calculations.

$$\boxed{0.3} + \boxed{0.07} = \boxed{}$$

$$\boxed{0.54} + \boxed{} = \boxed{1}$$

$$\boxed{0.18} + \boxed{0.05} = \boxed{}$$

$$\boxed{3.25} + \boxed{0.6} = \boxed{}$$

$$\boxed{2.6} - \boxed{0.01} = \boxed{}$$

5 marks

Section 6:

round decimals with two decimal places to the nearest whole number and to one decimal place

14

Circle all the numbers which give 5 when rounded to the nearest whole number.

4.4

5.29

5.64

4.507

15.2

2 marks

15

Round these numbers to the nearest one decimal place.

$$3.84 \xrightarrow{\text{rounded to the nearest 1 decimal place}} \boxed{}$$

$$2.06 \xrightarrow{\text{rounded to the nearest 1 decimal place}} \boxed{}$$

$$4.549 \xrightarrow{\text{rounded to the nearest 1 decimal place}} \boxed{}$$

3 marks

Section 7:

- recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal
- solve problems which require knowing percentage and decimal equivalents

16

Convert the fractions to percentages.

$$\frac{40}{100} = \boxed{} \%$$

$$\frac{8}{100} = \boxed{} \%$$

$$\frac{17}{100} = \boxed{} \%$$

$$\frac{9}{10} = \boxed{} \%$$

4 marks

17

Draw lines to match the equivalent fractions, decimals and percentages.

The first one has been done for you.

| | | |
|----------------|------|-----|
| $\frac{1}{4}$ | 0.2 | 50% |
| $\frac{1}{5}$ | 0.25 | 4% |
| $\frac{1}{2}$ | 0.4 | 40% |
| $\frac{2}{5}$ | 0.5 | 20% |
| $\frac{2}{50}$ | 0.04 | 25% |

Diagram showing connections: A line connects $\frac{1}{2}$ to 0.5, and another line connects 0.5 to 50%.

4 marks