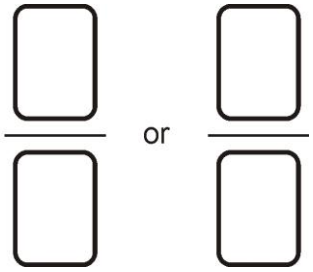
Q1.

Karen makes a fraction using two number cards.

She says,

'My fraction is equivalent to $\frac{1}{2}$

One of the number cards is 6'



What could Karen's fraction be?

Give both possible answers.

2 marks

Q2.

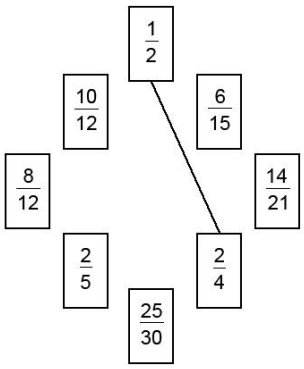
Complete these fractions to make each equivalent to $\frac{3}{5}$ $\frac{\square}{10}$ $\frac{\square}{15}$ $\frac{12}{\square}$

1 mark

Q3.

Join pairs of equivalent fractions.

One is done for you.



2 marks

Q4.

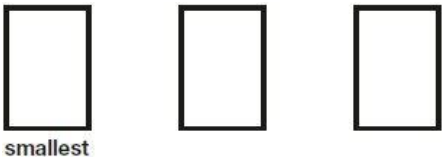
Write the two missing values to make these equivalent fractions correct.

$\frac{\square}{30} = \frac{10}{12} = \frac{30}{\square}$

2 marks

Q5. $\frac{6}{5}$ $\frac{3}{5}$ $\frac{3}{4}$

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



1 mark

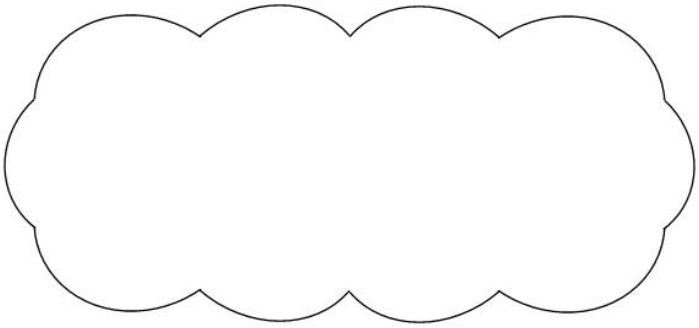
Q6.

Is $\frac{4}{9}$ greater than $\frac{1}{3}$?

Circle **Yes** or **No**.

Yes / No

Show how you know.

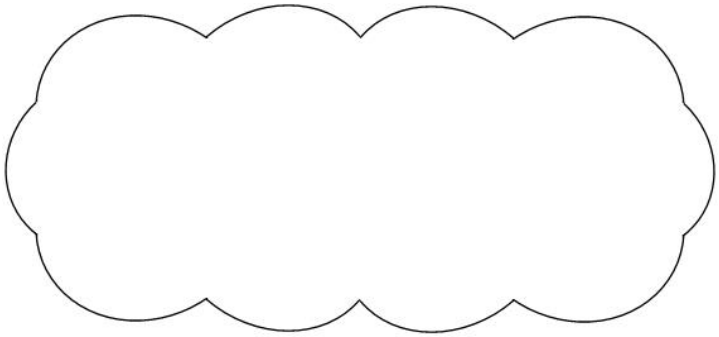


Is $\frac{4}{9}$ half of $\frac{8}{18}$?

Cirle **Yes** or **No**.

Yes / No

Show how you know.



1 mark

Q7.

Circle the fraction that is greater than $\frac{1}{2}$ but less than $\frac{3}{4}$

$\frac{7}{8}$ $\frac{2}{5}$ $\frac{1}{3}$ $\frac{5}{8}$ $\frac{3}{6}$

1 mark

Q8.

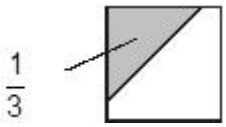
Two of the fractions below are **equivalent**.

Circle them. $\frac{2}{3}$ $\frac{6}{10}$ $\frac{9}{12}$ $\frac{10}{15}$ $\frac{16}{20}$

1 mark

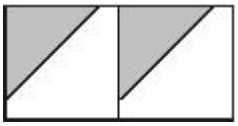
Q9.

$\frac{1}{3}$ of this square is shaded.



The same square is used in the diagrams below.

What fraction of this diagram is shaded?



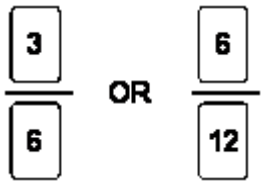
1 mark

What fraction of this diagram is shaded?

1 mark

Q1.

Award **TWO** marks for both fractions correct as shown:



If the answer is incorrect, award **ONE** mark for one fraction correct.

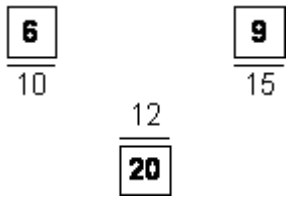
Accept fractions written in either order.

Up to 2

[2]

Q2.

Fractions completed as shown below:

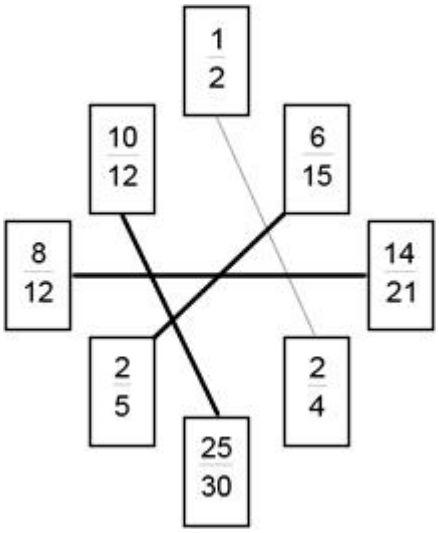


All three fractions must be correct for the award of the mark.

[1]

Q3.

Award **TWO** marks for three correct pairs joined, as shown.



Award **ONE** mark for any two correct pairs joined.

[2]

Q4.

$\frac{25}{30}$

1

$\frac{30}{36}$

1

[2]

Q5.

Fractions written in the correct order, as shown:

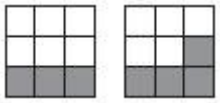
$\frac{3}{5}$ $\frac{3}{4}$ $\frac{6}{5}$

Accept the fraction joined to the correct box, rather than written in it.
***Do not** accept transcription errors or misreads for this question.*

[1]

Q6.

(a) Indicates **Yes** and gives a correct explanation, eg:

- $\frac{1}{3} = \frac{3}{9}, \frac{3}{9} < \frac{4}{9}$
- 
- $\frac{1}{3}$ of 9 is 3 not 4
- $\frac{4}{9}$ should be $\frac{1.333...}{3}$, not $\frac{1}{3}$
- 0.33... < 0.44...
- $\frac{1}{3} = \frac{4}{12}, \frac{4}{12} < \frac{4}{9}$
- $\frac{1}{3}$ of 27 = 9 and $\frac{4}{9}$ of 27 = 12

Accept minimally acceptable explanation, eg:

- $\frac{3}{9}$
- $\frac{9}{27}, \frac{12}{27}$
- *4 is over a third of 9*
- $\frac{1}{3}$ *of 9 is 3*
- $\frac{4}{9}$ *is closer to a half than a third*
- *0.33, 0.44*

- *It is one ninth bigger*
- *If you divide* $\frac{4}{9}$ *by a* $\frac{1}{3}$ *you get* $\frac{4}{3}$
- $\frac{4}{12}$

! Inaccuracies in diagrams

Throughout the question, condone provided the pupil's intention to divide into thirds, ninths and/or eighteenths is clearly shown, and the correct sections are shaded

! Indicates ***No****, or no decision made, but explanation clearly correct*

Condone provided the explanation is more than minimal

Do not accept *incomplete or incorrect explanation, eg:*

- *If you draw a pie chart for* $\frac{4}{9}$ *, more than* $\frac{1}{3}$ *is shaded*
- *Put them into 27ths and* $\frac{4}{27} > \frac{1}{27}$
- $\frac{1}{3} \times 3 = \frac{3}{9}$

1
U1

(b) Indicates **No** and gives a correct explanation, eg:

- The fractions are equal; if you multiply the numerator and denominator by the same number the fractions are equivalent
- $\frac{4}{9} = \frac{8}{18}$
- $\frac{4}{9} \times 2 = \frac{8}{9}$ not $\frac{8}{18}$
- $\frac{8}{18} \div 2 = \frac{4}{18}$ which is $\frac{2}{9}$ not $\frac{4}{9}$
- To double the fraction, you don't double the numerator and the denominator, you just double the numerator
- To halve the fraction, you don't halve the denominator, only the numerator

Accept minimally acceptable explanation, eg:

- *Equal*
- *Equivalent*
- *Same*
- $\frac{4}{9}$ *is half of* $\frac{8}{9}$
- $\frac{4}{18}$ *is half of* $\frac{8}{18}$
- *You only double the top number*
- *You only halve the top number*

! Indicates ***Yes****, or no decision made, but explanation clearly correct*

Condone provided the explanation is more than minimal

Do not accept *Incomplete explanation, eg*

- *If you double the top and the bottom number of*

- $\frac{4}{18}$ *is half of* $\frac{8}{18}$,
- $\frac{4}{9}$ *is half of* $\frac{8}{9}$

you get

1
U1

[2]

Q7.

Fraction circled as shown:

$\frac{7}{8}$ $\frac{2}{5}$ $\frac{1}{3}$ $\frac{\mathbf{5}}{\mathbf{8}}$ $\frac{3}{6}$

Accept alternative unambiguous indications, eg fraction ticked, crossed or underlined.

[1]

Q8.

Two fractions circled as shown:

$\frac{\mathbf{2}}{\mathbf{3}}$ $\frac{6}{10}$ $\frac{9}{12}$ $\frac{\mathbf{10}}{\mathbf{15}}$ $\frac{6}{20}$

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

Accept alternative unambiguous indications, eg fractions ticked, crossed or underlined.

[1]

Q9.

(a) $\frac{1}{3}$

Accept equivalent fractions or decimals.

1

(b) $\frac{1}{9}$

Accept equivalent fractions or decimals.

U1

[2]