## Test Base Extension -Thursday LO

**Q1.**

Write the missing fraction.

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

1 mark

**Q2.**

(a) Write numbers in the boxes to make this fraction calculation correct.

$$\frac{1}{\square} + \frac{\square}{5} = \frac{7}{10}$$

1 mark

(b) Now write two **different** numbers to make the calculation correct.

$$\frac{1}{\square} + \frac{\square}{5} = \frac{7}{10}$$

1 mark

**Q3.**

Write the missing fractions.

$$1\frac{3}{5} + \frac{3}{10} + \square = 2\frac{7}{10}$$

1 mark

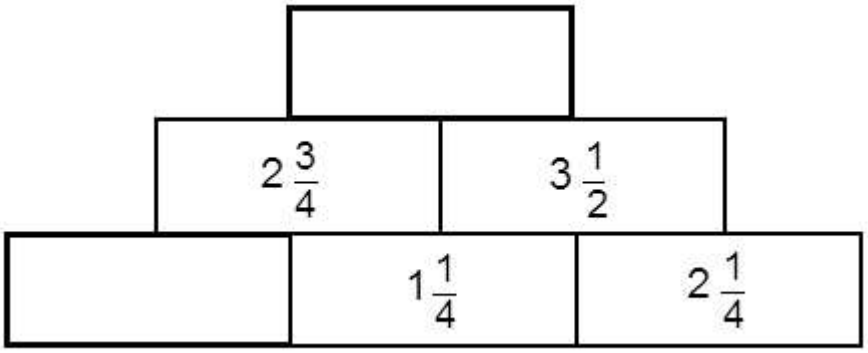
$$2\frac{3}{4} + \square - \frac{1}{5} = 3$$

1 mark

## Q4.

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

Write the missing numbers.




2 marks

## Test Base Extension -Fraction questions based on your learning over the last week

## Q5.

Write the correct sign **<** **=** or **>** in each box to make these sentences correct.

$\frac{3}{10}$ ☐ $\frac{10}{3}$

$\frac{6}{5}$ ☐ $\frac{8}{7}$

$\frac{39}{27}$ ☐ $\frac{26}{18}$

1 mark

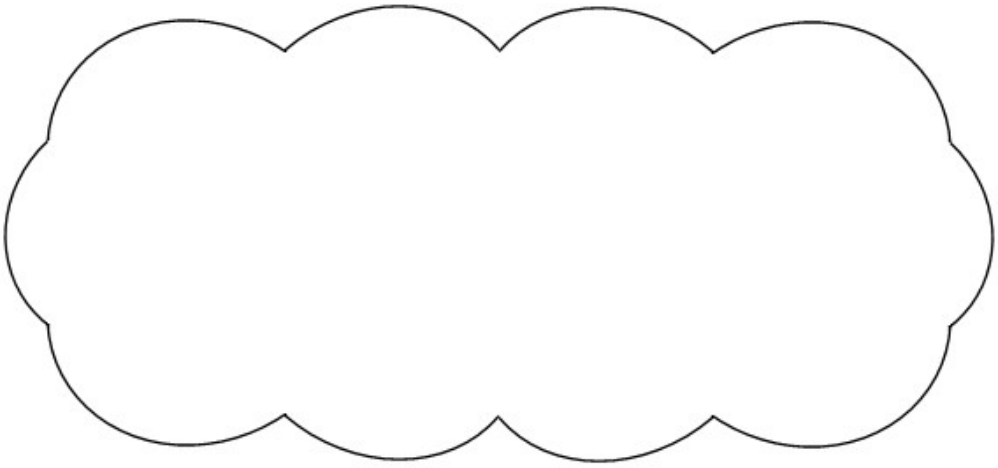
**Q6.**

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

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

Yes / No

Show how you know.



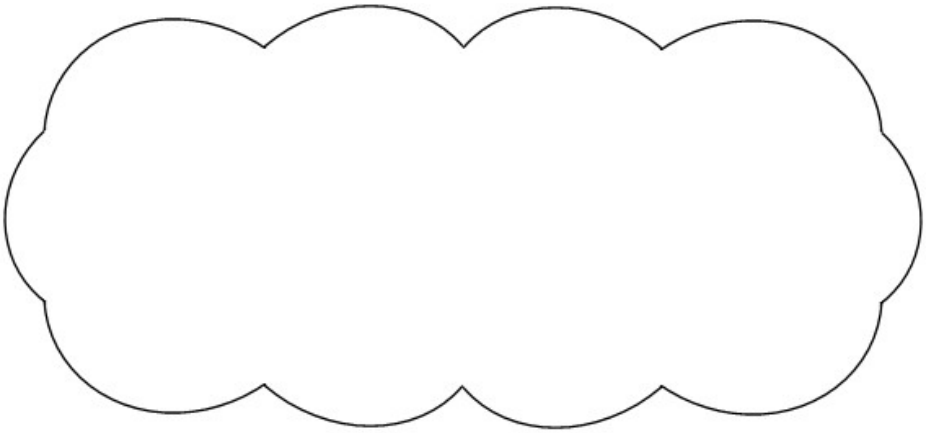
1 mark

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

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

Yes / No

Show how you know.



1 mark

## Q7.

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

## Q8.

Circle the biggest fraction.

$\frac{13}{6}$ $\frac{11}{5}$ $\frac{7}{4}$ $\frac{5}{3}$

1 mark

## Q9.

Circle the fraction that is bigger than $\frac{7}{5}$

$\frac{5}{7}$ $\frac{11}{6}$ $\frac{7}{10}$ $\frac{4}{3}$

1 mark

## Q1.

$\frac{5}{12}$

**[1]**

## Q2.

(a) Gives a pair of numbers to make the calculation correct, eg:

- $\frac{1}{\boxed{2}} + \frac{\boxed{1}}{5}$
- $\frac{1}{\boxed{10}} + \frac{\boxed{3}}{5}$

*Accept the following*

- $\frac{1}{\boxed{-10}} + \frac{\boxed{4}}{5}$
- $\frac{1}{\boxed{-2}} + \frac{\boxed{6}}{5}$

***Do not accept** use of non-integers, eg:*

- $\frac{1}{\boxed{3.33...}} + \frac{\boxed{2}}{5}$

**1**

(b) Gives a **different** pair of numbers to make the calculation correct

**1**

**[2]**

## Q3.

$\frac{8}{10}$ or $\frac{4}{5}$ (or equivalent)

**1**

$\frac{9}{20}$ (or equivalent)

**1**

**[2]**

## Q4.

(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]**

## Q5.

Award **ONE** mark for the sentences completed as shown.

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

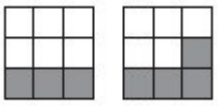
$\frac{6}{5}$ > $\frac{8}{7}$

$\frac{39}{27}$ = $\frac{26}{18}$

**[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* $\frac{8}{18}$ *,*

*you get* • $\frac{4}{9}$ *is half of* $\frac{8}{9}$

**1**
**U1**

**[2]**

## Q7.

Two fractions circled as shown:

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

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

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

**[1]**

## Q8.

$\frac{11}{5}$ indicated

**[1]**

## Q9.

$\frac{11}{6}$

**[1]**