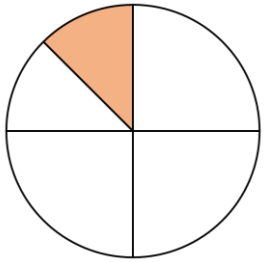
Year 7

Fractional Thinking

Name _____

1 Explain why this diagram does not show $\frac{1}{5}$



It is not split into equal parts.

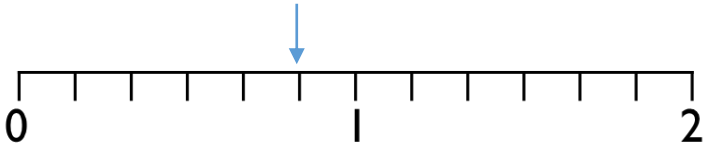
1 mark

2 $\frac{3}{5} = \frac{\boxed{6}}{10}$

You may use the bar model to help you.

1 mark

3 What fraction is the arrow pointing to?



$\frac{5}{6}$

1 mark

What do you need to add to this fraction to make 2?

$1\frac{1}{6}$

1 mark

4 Calculate.

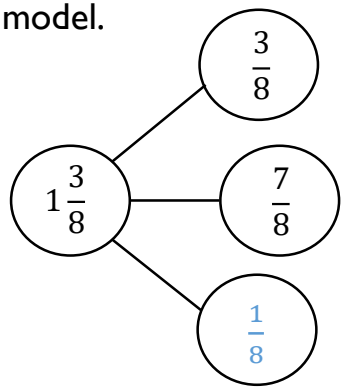
$\frac{3}{8} + \frac{1}{8} + \frac{1}{8} =$ $\frac{5}{8}$

$\frac{5}{7} - \frac{2}{7} =$ $\frac{3}{7}$

$\frac{5}{12} + \frac{1}{4} =$ $\frac{8}{12}$ / $\frac{3}{4}$

3 marks

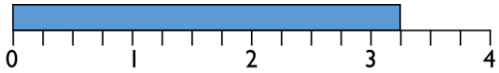
5 Complete the part-whole model.



1 mark

6 Write the mixed numbers as improper fractions.

$3\frac{1}{4} = \frac{13}{4}$



$4\frac{2}{3} = \frac{14}{3}$

2 marks

7 Calculate $3\frac{5}{12} + 2\frac{1}{3}$

1 mark for correct method with one error.

$5\frac{9}{12}$ / $5\frac{3}{4}$ / $\frac{23}{4}$ oe

2 marks

8 Calculate $\frac{1}{4} + 0.6$

0.85 / $\frac{17}{20}$

1 mark

9 Compare using $<, >$ or $=$

$\frac{6}{10}$ $<$ $0.4 + \frac{2}{5}$

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

2 marks

10 $a = \frac{5}{6}$ and $b = \frac{2}{3}$

Calculate

$a - b =$ $\frac{1}{6}$

$a + b =$ $\frac{9}{6}$ / $1\frac{1}{2}$ oe

2 marks

11 Jay drinks $7\frac{2}{5}$ litres of water in a week.

H Amina drinks $5\frac{2}{3}$ litres of water in a week.

How much more water does Jay drink than Amina?

1 mark for correct method with one error.

$1\frac{11}{15}$

2 marks

12 Write as a single fraction.

H

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

$\frac{7x}{10}$

1 mark

Total marks