

## Week beginning June 8<sup>th</sup>

### MONDAY 8<sup>th</sup> JUNE

#### RED QUESTIONS

1.

a) Complete the equivalent fractions to match each diagram.

Diagram 1:  $\frac{1}{2} = \frac{\boxed{\phantom{00}}}{8}$

Diagram 2:  $\frac{1}{2} = \frac{3}{\boxed{\phantom{00}}}$

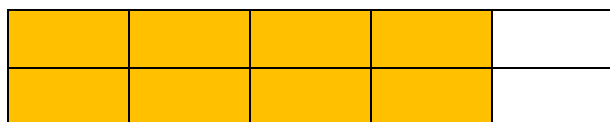
Diagram 3:  $\frac{1}{2} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$

$$\frac{1}{2} = \frac{4}{8}$$

$$\frac{1}{2} = \frac{3}{6}$$

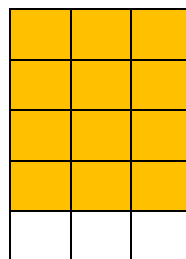
$$\frac{1}{2} = \frac{8}{16}$$

2. Design flags showing fractions equivalent to  $\frac{4}{5}$ .



$$\frac{4}{5} = \frac{8}{10}$$

Any 8 shaded.

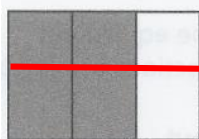


$$\frac{4}{5} = \frac{12}{15}$$

Any 12 shaded.

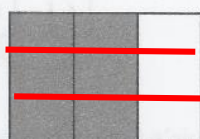
#### BLUE QUESTIONS

1a) Draw lines on each diagram to show different fractions equivalent to  $\frac{2}{3}$ .



$$\frac{2}{3} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

$$\frac{2}{3} = \frac{4}{6}$$



$$\frac{2}{3} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

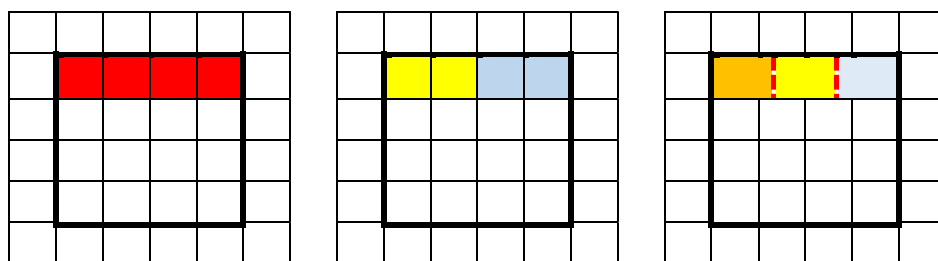
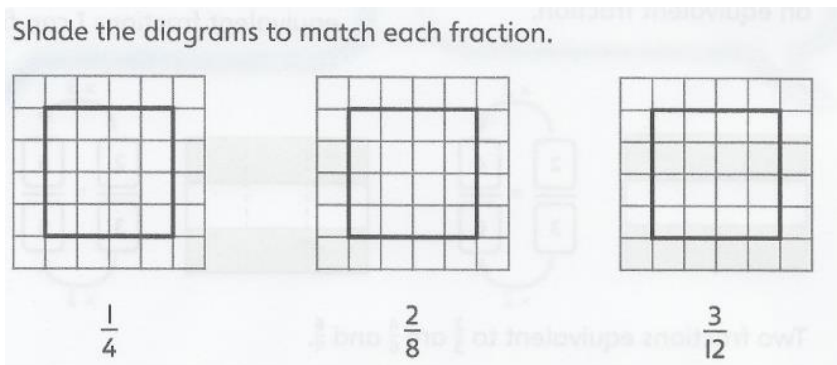
$$\frac{2}{3} = \frac{6}{9}$$



$$\frac{2}{3} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

$$\frac{2}{3} = \frac{8}{12}$$

b)



What do you notice about these fractions? Describe them using mathematical language.

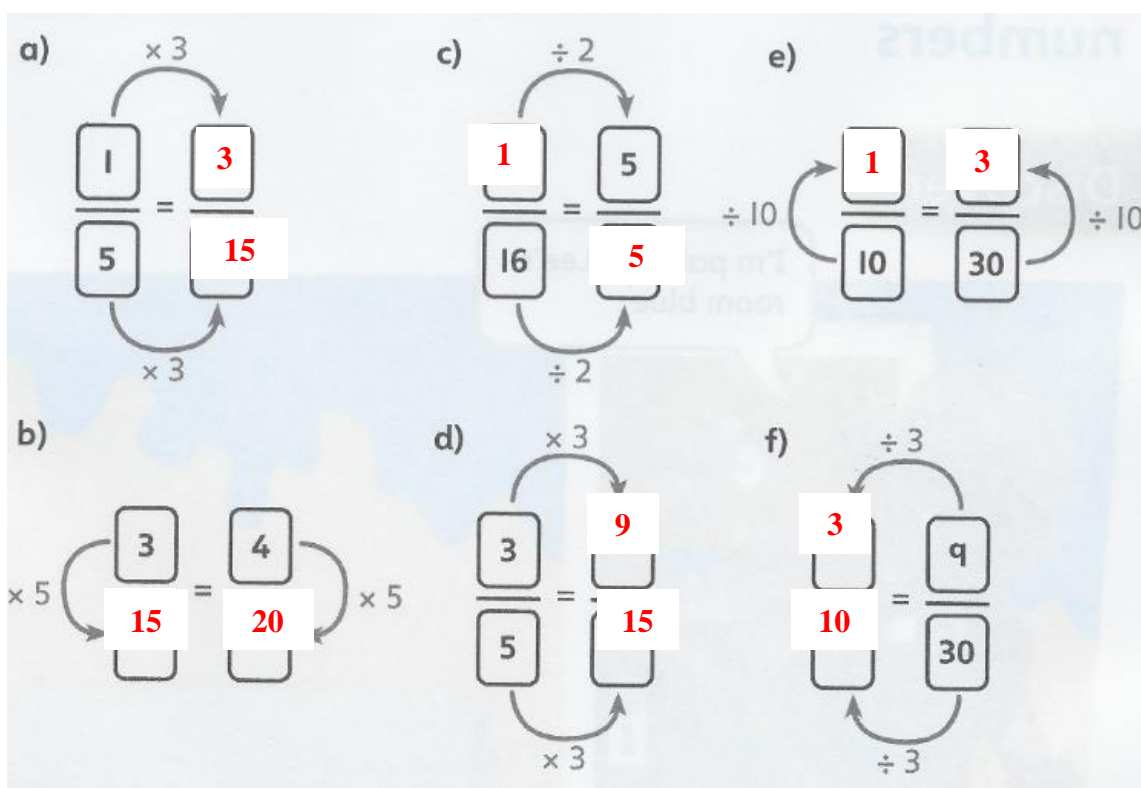
They all represent the same area and so they are equivalent.

Therefore  $\frac{1}{4} = \frac{2}{8} = \frac{3}{12}$

The numerator is always one quarter of the denominator for fractions equivalent to  $\frac{1}{4}$ .

The denominator is always four times bigger than the numerator for fractions equivalent to  $\frac{1}{4}$ .

2.



3. Which fractions in the box below are equivalent to  $\frac{8}{10}$ ?

|               |                 |                 |                 |                 |                  |
|---------------|-----------------|-----------------|-----------------|-----------------|------------------|
| $\frac{4}{5}$ | $\frac{45}{50}$ | $\frac{20}{25}$ | $\frac{25}{30}$ | $\frac{12}{15}$ | $\frac{88}{100}$ |
|---------------|-----------------|-----------------|-----------------|-----------------|------------------|

$$\frac{4}{5} \quad \frac{20}{25} \quad \frac{12}{15}$$

4. Which fraction is the odd one out? Explain why you think this.

a)  $\frac{3}{4} \quad \frac{30}{40} \quad \frac{60}{100}$

b)  $\frac{10}{100} \quad \frac{2}{5} \quad \frac{5}{50}$

$\frac{60}{100}$  because it is not equivalent to  $\frac{3}{4}$ .

$$\frac{3}{4} \xrightarrow{\times 25} \frac{75}{100}$$

$\frac{2}{5}$  because it is not equivalent to  $\frac{1}{10}$ .

$$\frac{2}{5} \xrightarrow{\times 2} \frac{4}{10}$$

## YELLOW QUESTIONS

1. Which fraction is the odd one out? Explain why you think this.

a)  $\frac{5}{6} \quad \frac{15}{18} \quad \frac{55}{60} \quad \frac{25}{30}$

b)  $\frac{3}{5} \quad \frac{15}{20} \quad \frac{30}{50} \quad \frac{18}{30}$

2. Complete the different equivalent fractions for each fraction shown.

a)  $\frac{80}{240} = \frac{8}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{6} = \frac{200}{\boxed{\phantom{00}}}$

b)  $\frac{3}{12} = \frac{6}{\boxed{\phantom{00}}} = \frac{\boxed{\phantom{00}}}{32} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$

Looking for multiples or factors will help you decide what to multiply or divide by each time.

a)  $\frac{80}{240} \xrightarrow{\div 10} \frac{8}{24} \xrightarrow{\div 4} \frac{2}{6} \xrightarrow{\times 100} \frac{200}{600}$

b)  $\frac{3}{12} \xrightarrow{\times 2} \frac{6}{24} \xrightarrow{\div 8} \frac{8}{32} \xrightarrow{\div 3} \frac{1}{4}$

I know that 8 is a common factor of 24 and 32, so  $\frac{6}{24} = \frac{2}{8} = \frac{8}{32} \xrightarrow{\div 3} \frac{1}{4}$

3. Use each set of digit cards to create two equivalent fractions.

What is the simplest fraction each one is equivalent to?

a) 

|     |
|-----|
| 100 |
|-----|

|   |
|---|
| 4 |
|---|

|    |
|----|
| 25 |
|----|

|    |
|----|
| 16 |
|----|

 $\frac{4}{16} = \frac{25}{100} = \frac{1}{4}$

b) 

|   |
|---|
| 5 |
|---|

|   |
|---|
| 6 |
|---|

|    |
|----|
| 10 |
|----|

|    |
|----|
| 12 |
|----|

 $\frac{5}{10} = \frac{6}{12} = \frac{1}{2}$

c) 

|   |
|---|
| 9 |
|---|

|    |
|----|
| 30 |
|----|

|    |
|----|
| 10 |
|----|

|    |
|----|
| 27 |
|----|

 $\frac{10}{30} = \frac{9}{27} = \frac{1}{3}$

d) 

|    |
|----|
| 25 |
|----|

|    |
|----|
| 30 |
|----|

|    |
|----|
| 75 |
|----|

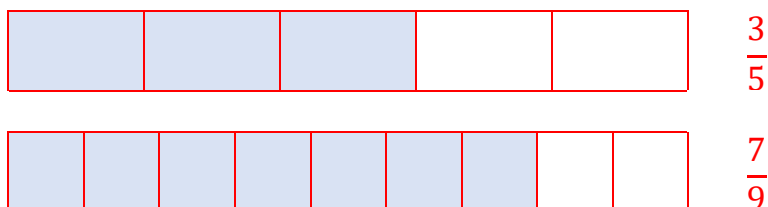
|    |
|----|
| 10 |
|----|

 $\frac{10}{30} = \frac{25}{75} = \frac{1}{3}$

4. Henrietta says, “ $\frac{3}{5} = \frac{7}{9}$  because the denominator is always two more than the numerator.”

Is she correct? Use calculations or models to show your reasoning and prove that you are correct.

Henrietta is incorrect because there are no common factors of 5 and 9 that will give a common denominator. The only factors of 5 are 1 and 5, because 5 is a prime number, and 5 is not a factor of 9. So, the only common factor is 1 and multiplying the numerator and denominator will not change the fractions.



The fractions do not represent the same part of the whole bar.

**TUESDAY 9<sup>th</sup> JUNE**

### RED QUESTIONS

Write in the missing numbers to simplify the fractions.

**a)**

$\frac{3}{12} = \frac{1}{\boxed{4}}$

$\div 3$  (above the bar)

$\div 3$  (below the bar)

**b)**

$\frac{35}{42} = \frac{\boxed{5}}{\boxed{6}}$

$\div 7$  (above the bar)

$\div 7$  (below the bar)

**c)**

$\frac{25}{35} = \frac{\boxed{5}}{\boxed{7}}$

$\div 5$  (above the bar)

$\div 5$  (below the bar)

### BLUE QUESTIONS

1. Simplify these fractions.

a)  $\frac{14}{24} = \frac{\boxed{7}}{\boxed{12}}$

b)  $\frac{6}{15} = \frac{\boxed{2}}{\boxed{5}}$

c)  $\frac{20}{45} = \frac{\boxed{4}}{\boxed{9}}$

d)  $\frac{12}{16} = \frac{\boxed{3}}{\boxed{4}}$

e)  $\frac{72}{\boxed{80}} = \frac{9}{10}$

f)  $\frac{\boxed{18}}{24} = \frac{3}{4}$

2. Write in the missing numbers.

Write in the missing numbers.

$$\frac{90}{120} = \frac{\boxed{45}}{60} = \frac{15}{\boxed{20}} = \frac{\boxed{3}}{4}$$

3. Which fraction is the odd one out? Why?

a)  $\frac{5}{15}$     $\frac{15}{45}$     $\frac{10}{20}$     $\frac{20}{60}$

b)  $\frac{12}{18}$     $\frac{120}{180}$     $\frac{18}{24}$     $\frac{24}{36}$

a)

$$\frac{5}{15} \xrightarrow{\div 3} \frac{1}{3} \quad \frac{15}{45} \xrightarrow{\div 15} \frac{1}{3} \quad \frac{10}{20} \xrightarrow{\div 10} \frac{1}{2} \quad \frac{20}{60} \xrightarrow{\div 20} \frac{1}{3}$$

$\frac{10}{20}$  is the odd one out because it is the only one  $\neq \frac{1}{3}$

$$\frac{10}{20} \xrightarrow{\div 10} \frac{1}{2}$$

b)

$$\frac{12}{18} \xrightarrow{\div 6} \frac{2}{3} \quad \frac{120}{180} \xrightarrow{\div 60} \frac{2}{3} \quad \frac{18}{24} \xrightarrow{\div 6} \frac{3}{4} \quad \frac{24}{36} \xrightarrow{\div 12} \frac{2}{3}$$

$\frac{18}{24}$  is the odd one out because it is the only one  $\neq \frac{2}{3}$

$$\frac{18}{24} \xrightarrow{\div 6} \frac{3}{4}$$

## YELLOW QUESTIONS

1. Henry thinks  $\frac{4}{6}$  in its simplest form is  $\frac{1}{1.5}$ .

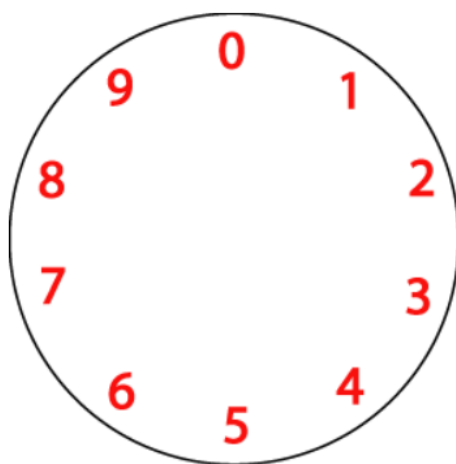
Is he correct? Explain how you know.

Henry is incorrect. A fraction has whole numbers as the numerator and denominator.

The lowest common multiple of 4 and 6 is 12 as factors are also whole numbers.

$$\frac{4}{6} = \frac{2}{3}$$

2. On Annie's ninth birthday her Mum made her a cake which had the figures from 0 to 9 round the edge in red icing instead of candles.



Starting from the centre, Annie cut the cake into 3 pieces with 3 cuts so that the numbers on each piece added to the same total.

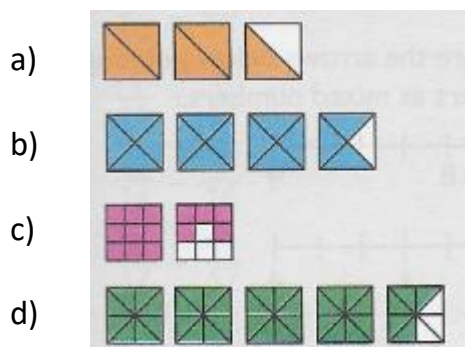
Where were the cuts and what fraction of the whole cake was each piece?

1. Add up all the numbers on the cake. They should equal 45.
2. Divide the number by 3 because that is how many pieces of cake they want.
3. Add up three sets of numbers that equal 15. You should have:
  - i)  $9+0+1+2+3$
  - ii)  $6+5+4$
  - iii)  $8+7$

## WEDNESDAY 10<sup>th</sup> JUNE

### RED QUESTIONS

1. Write the fraction shaded as an improper fraction and a mixed number.



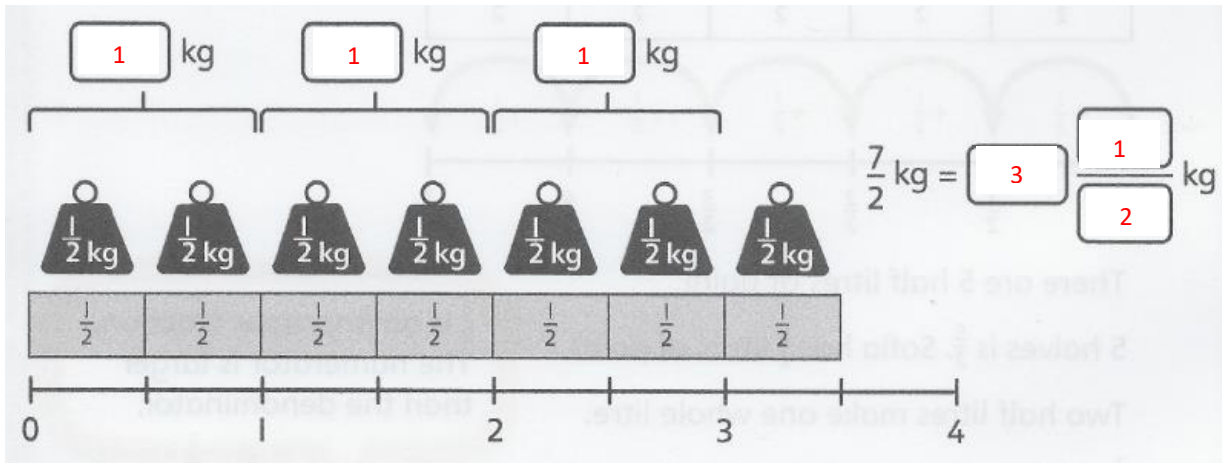
a) There are 5 halves =  $\frac{5}{2} = 2 \frac{1}{2}$

b) There are 15 quarters =  $\frac{15}{4} = 3 \frac{3}{4}$

c) There are 14 ninths =  $\frac{14}{9} = 1 \frac{5}{9}$

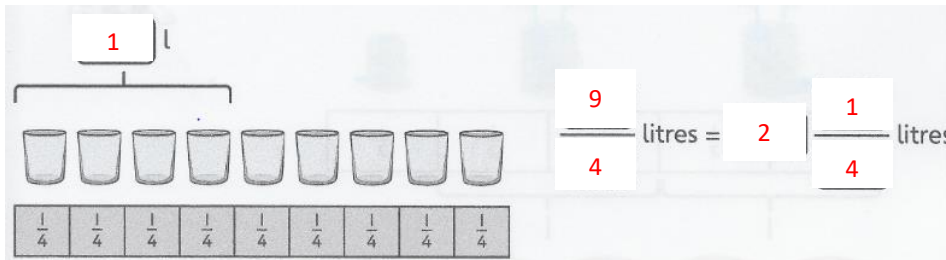
d) There are 37 eighths =  $\frac{37}{8} = 4 \frac{5}{8}$

2. Each weight has a mass of  $\frac{1}{2}$  kg. Write the total mass of the weights as a mixed number.



### BLUE QUESTIONS

- 1.a) Each glass holds  $\frac{1}{4}$  litre of orange juice.



What is the total volume of juice as a mixed number and as an improper fraction?

- b) Harry has  $\frac{11}{3}$  metres of ribbon.

Complete the bar model and write the length as a mixed number.



2. Max has 15 quarter circles. He joins them together to make whole circles.

- a) 4 quarters make 1 whole circle.

- b) How many circles does Max have in total? Give your answer as a mixed number and an improper fraction.  $15 \div 4 = 3 \text{ r } 3$

$$\frac{15}{4} = 3 \frac{3}{4}$$

3. Convert these improper fractions to mixed numbers.

a)  $\frac{11}{3} = 3 \frac{2}{3}$

$$11 \div 3 = 3 \text{ r } 2$$

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

$$13 \div 4 = 3 \text{ r } 1$$

c)  $\frac{13}{5} = 2 \frac{3}{5}$

$$13 \div 5 = 2 \text{ r } 3$$

- d) Explain how could you use your answer to c) to convert  $\frac{14}{5}$  to a mixed number without actually working it out.

If  $\frac{13}{5} = 2 \frac{3}{5}$  then  $\frac{14}{5} = 2 \frac{4}{5}$  because  $\frac{14}{5} = \frac{13}{5} + \frac{1}{5} = 2 \frac{3}{5} + \frac{1}{5} = 2 \frac{4}{5}$

4. Write these improper fractions as mixed numbers in different ways.

a)  $\frac{14}{4} = \boxed{3} \frac{\boxed{2}}{4} = \boxed{3} \frac{\boxed{1}}{2}$  because  $\frac{2}{4} = \frac{1}{2}$

b)  $\frac{27}{6} = \boxed{4} \frac{\boxed{3}}{6} = \boxed{4} \frac{\boxed{1}}{\boxed{2}}$  because  $\frac{3}{6} = \frac{1}{2}$

c)  $\frac{40}{12} = 3 \frac{4}{12} = 3 \frac{1}{3}$  because  $\frac{4}{12} = \frac{1}{3}$

### YELLOW QUESTIONS

1. Match the improper fraction with the mixed number and the calculation that makes the conversion.

#### Improper fractions

A  $\frac{7}{2}$

B  $\frac{12}{5}$

C  $\frac{15}{7}$

D  $\frac{11}{4}$

E  $\frac{13}{4}$

F  $\frac{17}{5}$

G  $\frac{8}{3}$

H  $\frac{9}{2}$

I  $\frac{9}{5}$

#### Conversion calculation

a  $15 \div 7 = 2 \text{ rem } 1$

b  $3 \times 2 + 1 = 7$

c  $12 \div 5 = 2 \text{ rem } 2$

d  $2 \times 4 + 3 = 11$

e  $2 \times 4 + 1 = 9$

f  $1 \times 5 + 4 = 9$

g  $3 \times 4 + 1 = 13$

h  $8 \div 3 = 2 \text{ rem } 2$

i  $17 \div 5 = 3 \text{ rem } 2$

#### Mixed numbers

i  $3 \frac{1}{4}$

ii  $4 \frac{1}{2}$

iii  $3 \frac{2}{5}$

iv  $2 \frac{2}{5}$

v  $3 \frac{1}{2}$

vi  $1 \frac{4}{5}$

vii  $2 \frac{3}{4}$

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

ix  $2 \frac{1}{7}$

**A matches with b and v**

|          |          |             |
|----------|----------|-------------|
| <b>B</b> | <b>c</b> | <b>iv</b>   |
| <b>C</b> | <b>a</b> | <b>ix</b>   |
| <b>D</b> | <b>d</b> | <b>vii</b>  |
| <b>E</b> | <b>g</b> | <b>i</b>    |
| <b>F</b> | <b>l</b> | <b>iii</b>  |
| <b>G</b> | <b>h</b> | <b>viii</b> |
| <b>H</b> | <b>e</b> | <b>ii</b>   |
| <b>I</b> | <b>f</b> | <b>vi</b>   |



2. Find different solutions to this problem.

$$\frac{\blacktriangle}{10} = \blacksquare \frac{\star}{10}$$

Explain the relationship between  $\blacktriangle$   $\blacksquare$   $\star$

| $\blacktriangle$ | $\blacksquare$ | $\star$ |
|------------------|----------------|---------|
| 10               | 1              | 0       |
| 20               | 2              | 0       |
| 30               | 3              | 0       |
| 40               | 4              | 0       |

| $\blacktriangle$ | $\blacksquare$ | $\star$ |
|------------------|----------------|---------|
| 15               | 1              | 5       |
| 25               | 2              | 5       |
| 35               | 3              | 5       |
| 45               | 4              | 5       |

$$\blacktriangle = (10 \times \blacksquare) + \star$$

The square represents the number of wholes and the star represents the number of tenths left over.

3. Explain how  $\frac{17}{3}$  and  $\frac{19}{3}$  are related to the number 6.

$$\frac{17}{3} = 5 \frac{2}{3} \quad \text{and} \quad \frac{19}{3} = 6 \frac{1}{3}$$

On a number line they would be the same distance away from 6;

$5 \frac{2}{3}$  is 1 third less than 6 and

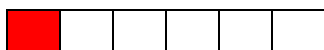
$6 \frac{1}{3}$  is 1 third more than 6.

THURSDAY 11<sup>th</sup> JUNE

### RED QUESTIONS

1. Compare these fractions by completing the bar models.

a)



$$\frac{1}{6} \quad \boxed{<} \quad \frac{3}{6}$$

c)



b)



$$\frac{4}{5} \quad \boxed{>} \quad \frac{3}{5}$$

d)



You could start by picking some numbers and then change one to make the calculation correct. Then look for patterns.

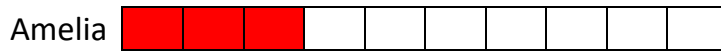
$$\frac{2}{3} \boxed{>} \frac{2}{6}$$

$$\frac{5}{8} \boxed{<} \frac{3}{4}$$

### BLUE QUESTIONS

1. Poppy and Amelia are running a race.

a) Amelia has completed  $\frac{3}{10}$  of the track and Poppy has completed  $\frac{2}{5}$ . Who has run further?



$$\frac{2}{5} > \frac{3}{10}$$

b) Later, Poppy has completed  $\frac{8}{10}$  and Amelia has completed  $\frac{4}{5}$ .

Is anyone in the lead? Prove that you are correct with a bar model.



No-one is in the lead because  $\frac{8}{10} = \frac{4}{5}$

2. Write each set of fractions in order from **largest** to **smallest**.

a)

b)

c)

a)  $\frac{3}{4} = \frac{6}{8}$  so  $\frac{7}{8} > \frac{6}{8} > \frac{3}{8}$  so  $\frac{7}{8} > \frac{3}{4} > \frac{3}{8}$

b)  $\frac{1}{2} = \frac{6}{12}$  so  $\frac{10}{12} > \frac{6}{12} > \frac{5}{12}$  so  $\frac{5}{6} > \frac{1}{2} > \frac{5}{12}$

$$\frac{5}{6} = \frac{10}{12}$$

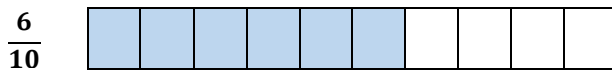
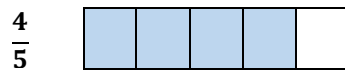
c)  $\frac{3}{4} = \frac{15}{20}$  so  $\frac{17}{20} > \frac{16}{20} > \frac{15}{20} > \frac{14}{20}$  so  $\frac{17}{20} > \frac{4}{5} > \frac{3}{4} > \frac{7}{10}$

$$\frac{7}{10} = \frac{14}{20}$$

$$\frac{4}{5} = \frac{16}{20}$$

## YELLOW QUESTIONS

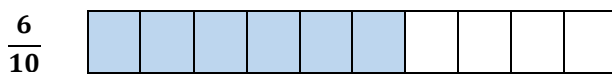
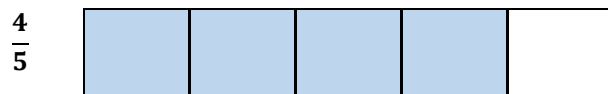
1. Bella says, "I used these diagrams to compare  $\frac{4}{5}$  and  $\frac{6}{10}$ . It looks like  $\frac{6}{10}$  is bigger."



Explain her mistake.

Bella has not used the same size whole to compare the fractions and so each fifth looks the same size as each tenth, whereas one fifth = two tenths.

Her model should look like this:



2. Use each card once to complete all the statements correctly.

Choose one of the statements and prove that you are correct.

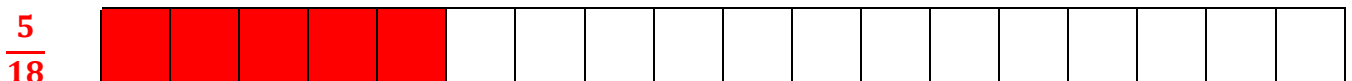
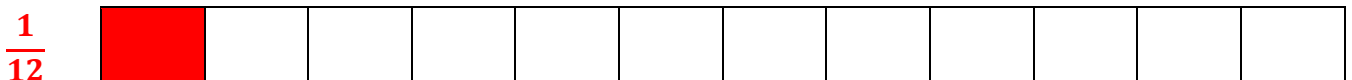
Cards: 1, 9, 12, 5

Statements:

- $\frac{2}{5} > \frac{5}{15}$
- $\frac{1}{8} < \frac{1}{4}$
- $\frac{6}{8} < \frac{3}{4}$
- $\frac{1}{12} < \frac{5}{18}$

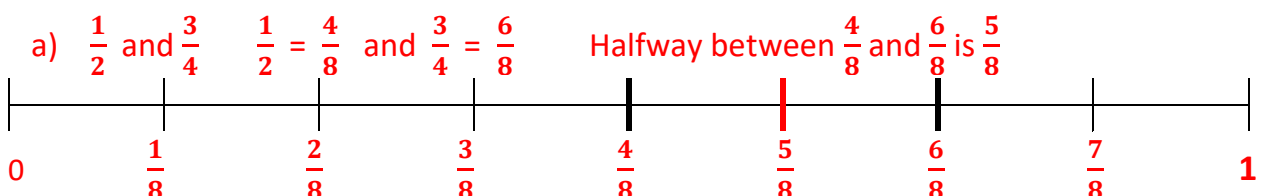
Proofs:

- $\frac{2}{5} = \frac{6}{15}$
- $\frac{2}{8} = \frac{1}{4}$
- $\frac{6}{8} = \frac{3}{4}$



3. Find the fraction which is halfway between each pair of numbers.

a)  $\frac{1}{2}$  and  $\frac{3}{4}$     b)  $\frac{5}{8}$  and  $\frac{3}{4}$     c)  $\frac{7}{12}$  and  $\frac{2}{3}$     d)  $\frac{1}{3}$  and  $\frac{1}{2}$



$$b) \frac{5}{8} \text{ and } \frac{3}{4} \quad \frac{5}{8} = \frac{10}{16} \quad \frac{3}{4} = \frac{12}{16} \quad \text{Halfway between } \frac{10}{16} \text{ and } \frac{12}{16} \text{ is } \frac{11}{16}$$

$$c) \frac{7}{12} \text{ and } \frac{2}{3} \quad \frac{2}{3} = \frac{8}{12} = \frac{16}{24} \quad \frac{7}{12} = \frac{14}{24} \quad \text{Halfway between } \frac{14}{24} \text{ and } \frac{16}{24} \text{ is } \frac{15}{24}$$

$$d) \frac{1}{3} \text{ and } \frac{1}{2} \quad \frac{1}{3} = \frac{2}{6} = \frac{4}{12} \quad \frac{1}{2} = \frac{6}{12} \quad \text{Halfway between } \frac{4}{12} \text{ and } \frac{6}{12} \text{ is } \frac{5}{12}$$

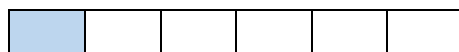
**FRIDAY 12<sup>th</sup> JUNE – Answers need to be returned to Mrs Wren**

### RED QUESTIONS

$$a) \frac{2}{3} + \frac{1}{6} =$$

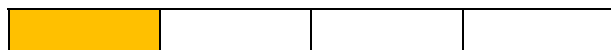
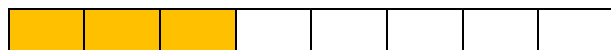


$$\frac{2}{3} \text{ is equivalent to } \frac{4}{6}$$



$$\frac{2}{3} + \frac{1}{6} = \frac{4}{6} + \frac{1}{6} = \frac{5}{6}$$

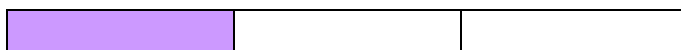
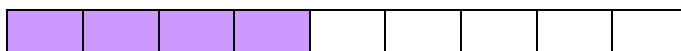
$$b) \frac{3}{8} + \frac{1}{4} =$$



$$\frac{1}{4} = \frac{2}{8}$$

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

$$c) \frac{4}{9} + \frac{1}{3} =$$



$$\frac{1}{3} = \frac{3}{9}$$

$$\frac{4}{9} - \frac{1}{3} = \frac{4}{9} - \frac{3}{9} = \frac{1}{9}$$

### BLUE QUESTIONS

1. Draw a model to find the sum of each pair of fractions.

$$a) \frac{1}{2} \text{ and } \frac{2}{5} \quad b) \frac{1}{3} \text{ and } \frac{1}{4} \quad c) \frac{3}{5} \text{ and } \frac{1}{3}$$

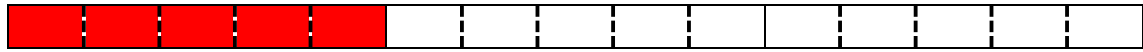
$$a) \frac{1}{2} + \frac{2}{5} = \frac{5}{10} + \frac{4}{10} = \frac{9}{10}$$



$$b) \frac{1}{3} + \frac{1}{4} = \frac{4}{12} + \frac{3}{12} = \frac{7}{12}$$



$$c) \frac{3}{5} + \frac{1}{3} = \frac{9}{15} + \frac{5}{15} = \frac{14}{15}$$



2. Find the totals of these fractions, giving your answer in its simplest form.

$$a) \frac{2}{3} + \frac{1}{8} = \frac{16}{24} + \frac{3}{24} = \frac{19}{24}$$

$$b) \frac{2}{3} + \frac{1}{12} = \frac{8}{12} + \frac{1}{12} = \frac{9}{12} = \frac{3}{4}$$

$$c) \frac{1}{5} + \frac{3}{10} = \frac{2}{10} + \frac{3}{10} = \frac{5}{10} = \frac{1}{2}$$

$$d) \frac{1}{4} + \frac{1}{6} = \frac{3}{12} + \frac{2}{12} = \frac{5}{12}$$

3. Find the difference between these fractions.

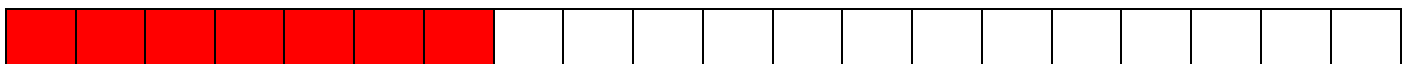
$$a) \frac{7}{12} - \frac{1}{3} = \frac{7}{12} - \frac{4}{12} = \frac{3}{12} = \frac{1}{4}$$

$$b) \frac{9}{10} - \frac{1}{2} = \frac{9}{10} - \frac{5}{10} = \frac{4}{10} = \frac{2}{5}$$

$$c) \frac{17}{20} - \frac{2}{5} = \frac{17}{20} - \frac{8}{20} = \frac{9}{20}$$

4. Draw a model to help you find the missing number.

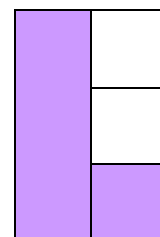
$$\frac{7}{20} - \frac{3}{10} = \frac{1}{20}$$



$$\frac{7}{20} - \frac{3}{10} = \frac{1}{20}$$

## YELLOW QUESTIONS

1. What fraction of the rectangle is shaded?  $\frac{4}{6}$  or  $\frac{2}{3}$



What addition does it represent?

$$\frac{1}{2} + \frac{1}{6} =$$

$$\frac{3}{6} + \frac{1}{6} = \frac{4}{6} = \frac{2}{3}$$

2. Explain the mistake in this calculation.

$$\frac{1}{4} + \frac{5}{8} = \frac{6}{12}$$

Before adding, the denominators need to be the same and then only the numerators are added. This person has just added the numerators together and the denominators together.

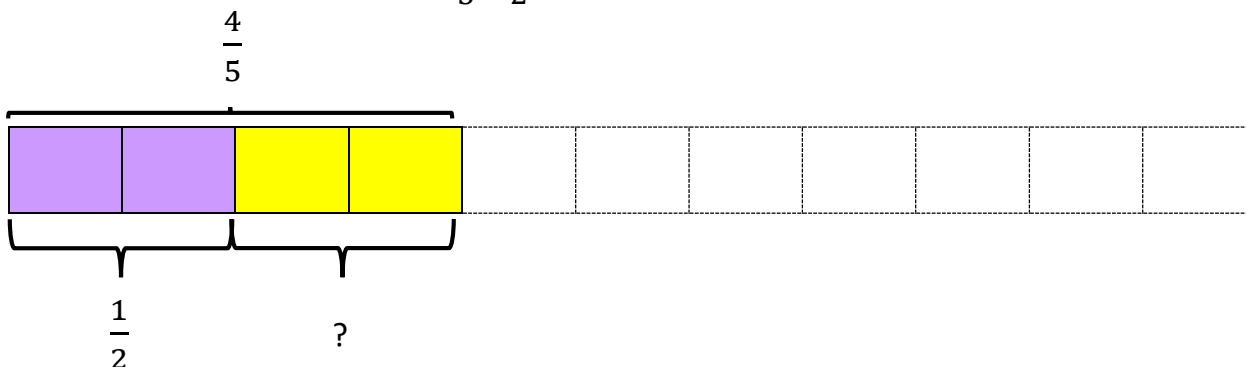
$$\frac{1}{4} + \frac{5}{8} = \frac{6}{12} = \frac{6}{24} + \frac{15}{24} = \frac{21}{24} = \frac{7}{8}$$

3. Bella has some flowers. She gives  $\frac{1}{5}$  of the flowers to Olivia and  $\frac{7}{10}$  of the flowers to her grandma. What fraction of the flowers does she have left?

$$\frac{1}{5} + \frac{7}{10} = \frac{2}{10} + \frac{7}{10} = \frac{9}{10} \quad \text{Bella gave away } \frac{9}{10} \text{ of her flowers.}$$

$$1 - \frac{9}{10} = \frac{10}{10} - \frac{9}{10} = \frac{1}{10} \quad \text{She has } \frac{1}{10} \text{ of her flowers left.}$$

4. Dennis drew a model to find  $\frac{4}{5} - \frac{1}{2}$ .

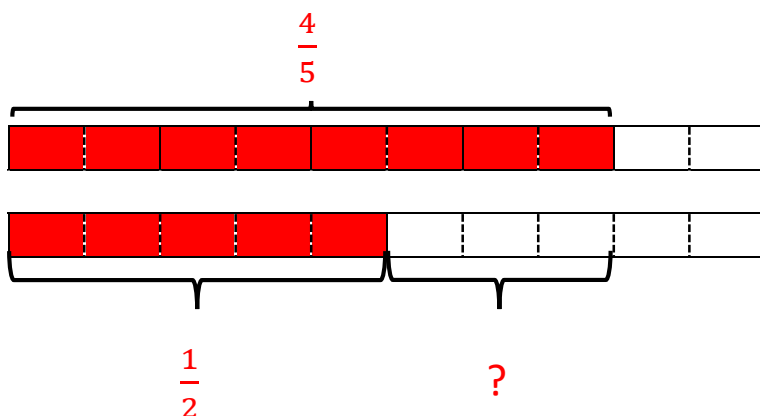


His model is drawn incorrectly.

Explain his mistakes, then draw the model correctly.

Dennis has realised that the common denominator is 10 but has not converted his fractions into tenths before drawing the model.

His model could look like this:



$$\frac{4}{5} - \frac{1}{2} = \frac{3}{10}$$

OR



$$\frac{4}{5} = \frac{8}{10} \quad \frac{1}{2} = \frac{5}{10}$$