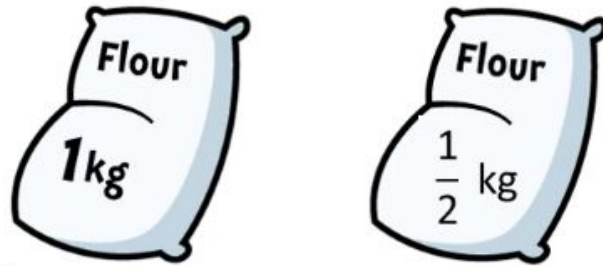


*I can carry out mixed
addition and subtraction
fractions.*

26.11.20

Let's work this out...

I have $1\frac{1}{2}$ kg of flour.



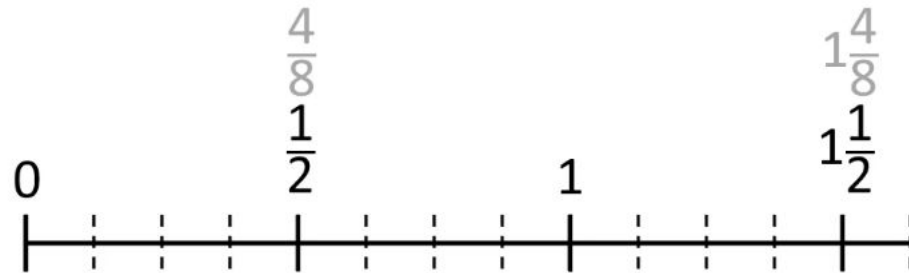
I use $\frac{5}{8}$ kg of flour to make a cake.
How much flour is left?

Let's work this out...

I have $1\frac{1}{2}$ kg of flour.

I use $\frac{5}{8}$ kg of flour to make a cake.

How much flour is left?



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

$\times 4$ (top arrow)

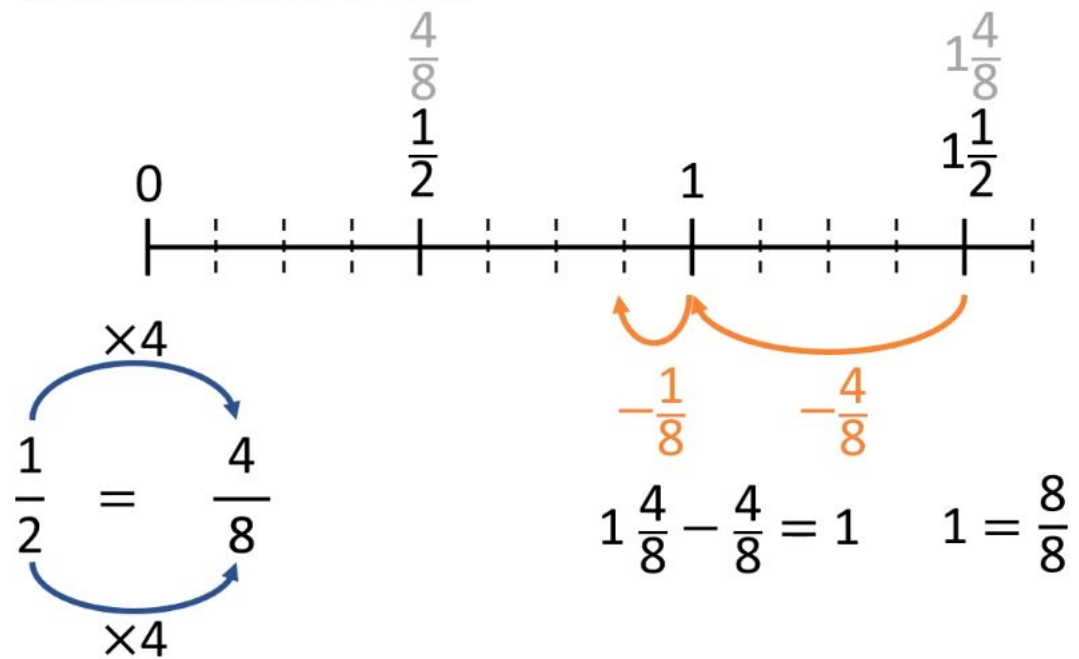
$\times 4$ (bottom arrow)

How else could we have solved that problem?

I have $1\frac{1}{2}$ kg of flour.

I use $\frac{5}{8}$ kg of flour to make a cake.

How much flour is left?

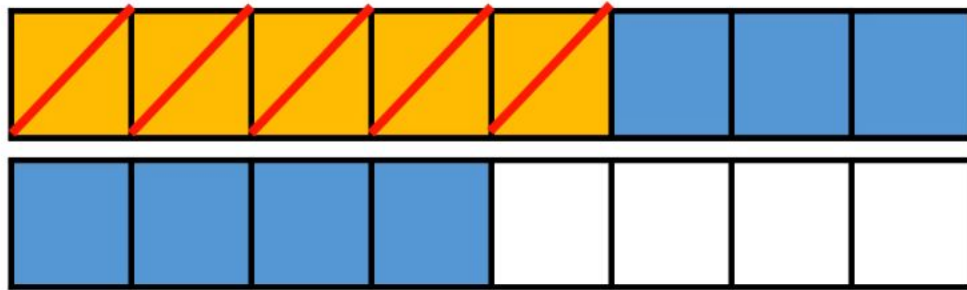


I have $1\frac{1}{2}$ kg of flour.

I use $\frac{5}{8}$ kg of flour to make a cake.

How much flour is left?

$$1 - \frac{5}{8} = \frac{3}{8} + \frac{4}{8} = \frac{7}{8} \text{ kg}$$



Let's work this out....

What are the common multiples between the fractions?

You need to change the denominators to be the same.

$$\frac{1}{6} + 1\frac{2}{5} + \boxed{} = 3\frac{12}{15}$$

$$\frac{1}{6} + 1\frac{2}{5} + \boxed{} = 3\frac{12}{15}$$

$$\frac{5}{30} + 1\frac{12}{30} + \boxed{} = 3\frac{24}{30}$$

$$1\frac{17}{30} + \boxed{2\frac{7}{30}} = 3\frac{24}{30}$$

Multiples of 6: 6, 12, 18, 24, **30**, 36

Multiples of 5: 5, 10, 15, 20, 25, **30**

Multiples of 15: 15, **30**, 45, 60, 75, 90

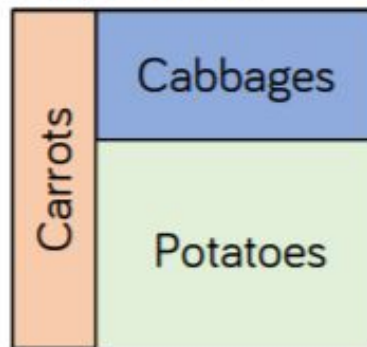
Let's work this out...

You need to use the methods that we have talked about to solve these questions.

Varied Fluency

- Alex has 5 bags of sweets.
- On Monday she eats $\frac{2}{3}$ of a bag and gives $\frac{4}{5}$ of a bag to her friend.
- On Tuesday she eats $1\frac{1}{3}$ bags and gives $\frac{2}{5}$ of a bag to her friend.
- What fraction of her sweets does Alex have left?
- Give your answer in its simplest form.

- Here is a vegetable patch. $\frac{1}{5}$ of the patch is for carrots. $\frac{3}{8}$ of the patch is for cabbages.



- What fraction of the patch is for carrots and cabbages altogether?
- What fraction of the patch is for potatoes?
- What fraction more of the patch is for potatoes than cabbages?
- Give your answers in their simplest form.

The vegetable patch has an area of 80 m^2

What is the area covered by each vegetable?

Your task...

Remember there is a link on the daily timetable to a video that can help you!

Mixed addition and subtraction

White
Rose
Maths

1 Work out the calculations.

a) $\frac{2}{5} + \frac{3}{4} = \square$

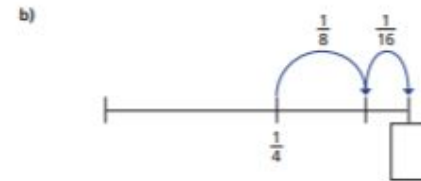
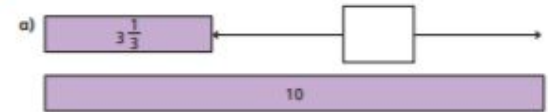
b) $2\frac{1}{4} - \frac{2}{3} = \square$

c) $3\frac{7}{10} - 2\frac{1}{4} = \square$

2 Complete the calculation.

$$\frac{5}{6} + 1\frac{2}{9} - \frac{1}{2} = \square$$

3 Work out the missing fractions.



4 Complete the calculations.

a) $\frac{2}{5} + \frac{1}{5} + \square = 1$

b) $\frac{2}{5} + \frac{1}{5} + \square = 1\frac{1}{2}$

c) $\frac{2}{5} + \frac{1}{5} + \square = \frac{4}{5}$

d) $\frac{4}{5} = \square - \frac{4}{5}$

Your task...

- 5 Which of these are true and which are false?

Can you decide without having to do the additions or the subtractions?

Talk about your reasons with a partner.

	True or false?
$2\frac{1}{3} + 3\frac{3}{4}$ is equal to $3\frac{1}{3} + 2\frac{3}{4}$	
$3\frac{3}{4} - \frac{1}{3}$ is less than $4\frac{3}{4} - 1\frac{1}{3}$	
$3\frac{3}{4} - 2\frac{1}{3}$ is equal to $3\frac{1}{3} - 2\frac{3}{4}$	

- 6 Complete the addition grid.

$1\frac{1}{4}$		$\frac{1}{4}$	= $3\frac{3}{5}$
$\frac{1}{25}$	$1\frac{3}{20}$		= $3\frac{39}{100}$
	$1\frac{1}{50}$	$1\frac{3}{100}$	= $5\frac{9}{20}$
<input type="text"/>	<input type="text"/>	<input type="text"/>	

- 7 A painter uses the following mixtures.

How much more green paint does she have than purple paint?



- 8 Eva and Amir are working out this calculation.

$$\frac{1}{4} + \frac{25}{100} - \frac{2}{8} - \frac{9}{36}$$




This is going to be very difficult, because I can't find a common denominator.



I have found an easier way.

Find Amir's solution. Explain how this calculation can be solved.


Problem Solving...

Find the value of the 

$$\text{heart} + 3\frac{4}{9} = 6\frac{1}{3}$$

$$8\frac{1}{10} - \text{heart} = \text{sun}$$

Problem Solving...

Find the value of the 

$$\text{heart} + 3\frac{4}{9} = 6\frac{1}{3}$$

$$8\frac{1}{10} - \text{heart} = \text{sun}$$

The value of the  is $2\frac{8}{9}$

The value of the  is $5\frac{19}{90}$

Problem Solving...

The mass of Annie's suitcase is $29\frac{1}{2}$ kg.

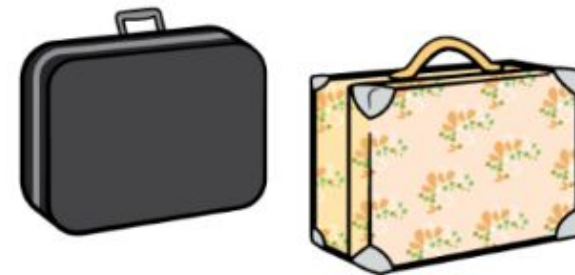
Teddy's suitcase is $2\frac{1}{5}$ kg lighter than Annie's.

How much does Teddy's suitcase weigh?

How much do the suitcases weigh altogether?

There is a weight allowance of 32 kg per suitcase.

How much below the weight allowance are Annie and Teddy?



Problem Solving...

The mass of Annie's suitcase is $29\frac{1}{2}$ kg.

Teddy's suitcase is $2\frac{1}{5}$ kg lighter than Annie's.

How much does Teddy's suitcase weigh?

How much do the suitcases weigh altogether?

There is a weight allowance of 32 kg per suitcase.

How much below the weight allowance are Annie and Teddy?



Teddy's suitcase weighs $27\frac{3}{10}$ kg

The suitcases weigh $56\frac{4}{5}$ kg altogether.

Annie is $2\frac{1}{2}$ kg under the weight allowance.

Teddy is $4\frac{7}{10}$ kg under the weight allowance.

Plenary...

True or False ?

Mixed addition and subtraction

$$\begin{array}{r} 1 \\ - \\ 4 \end{array}$$

$$\begin{array}{r} 3 \\ - \\ 4 \end{array}$$

The sum of the two cards is double the difference.

Plenary...

True or False ?

Mixed addition and subtraction

True

The sum of the two cards is $\frac{4}{4}$ or 1

The difference is $\frac{2}{4}$

Double $\frac{2}{4}$ is $\frac{4}{4}$