You may need to refer to this sheet a few times this week so make sure you keep it handy and don't throw it away.

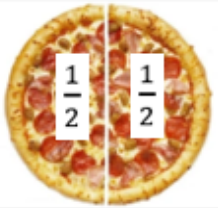
Day 1 – 22.02-21

Fractions greater than 1

To understand fractions greater than one it can be helpful to visualise them using objects which are often cut into fractions such as a pizza.

You already know what a whole pizza looks like. It looks looks like this

If we then cut the same pizza in half we would have 2 halves which together make 1 whole



So how much pizza would we have if we had 5 halves?

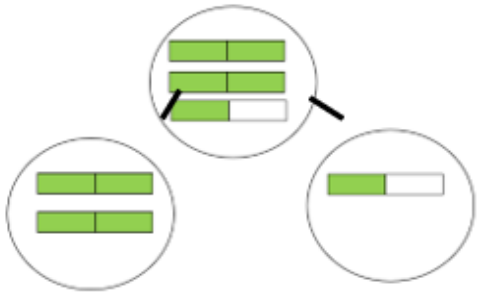
The answer is 2 whole pizzas and half a pizza

There are 5 halves altogether

5 halves = [2] whole + [1] half

Remember when the top and bottom number are the Same the fraction is 1 or 1 whole

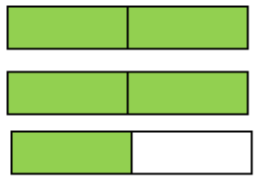
Another way of showing fractions pictorially is using bars. This is what the pizza fraction would look like using a Part Whole model made up of bars. As each bar is divided into 2, each part of the bar shows $\frac{1}{2}$ Remember the denominator shows the number of parts the whole bar has been split into.



There are 5 halves altogether

5 halves = [2] whole + [1] half

And here is the same fraction using bars and fractions rather than words.



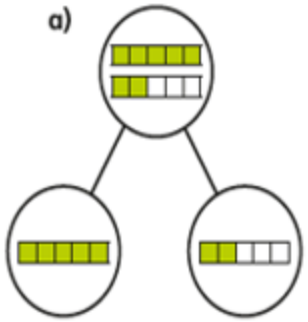
$\frac{5}{2}$ = [2] whole + [1] half

Notice how the fraction has a larger top number (numerator) than bottom number (denominator). Think back to what I said about when the top number and bottom number are the same it is 1 whole. So if the top number is more than the bottom number it means that it is more than 1 whole

Use all the information on this page to help you answer the questions on the next page.

1 Complete the sentences.

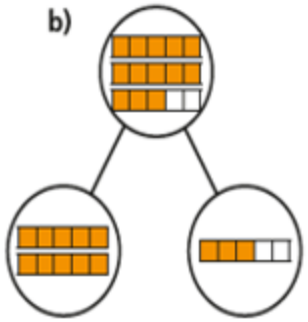
a)



There are 7 fifths altogether.

7 fifths = ☐ whole + ☐ fifths

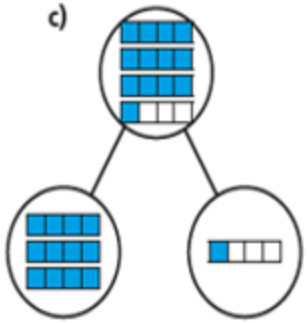
b)



There are ☐ fifths altogether.

☐ fifths = ☐ wholes + ☐ fifths

c)



There are ☐ quarters altogether.

☐ quarters = ☐ wholes + ☐ quarter

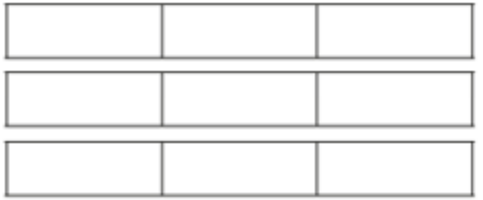
2 Shade the bar models to represent the fractions.

Complete the number sentences.

a) $\frac{5}{3}$

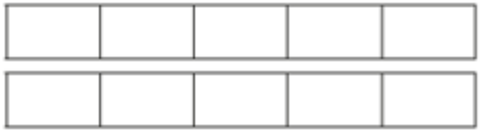
$\frac{5}{3}$ = ☐ whole + ☐ thirds = ☐

b) $\frac{8}{3}$



$\frac{8}{3}$ = ☐ wholes + ☐ thirds = ☐

c) $\frac{8}{5}$



$\frac{8}{5}$ = ☐ whole + ☐ fifths = ☐

Day 2 - 23.2.21

Add fractions

Today you are going to be adding fractions with the same denominator. In case you have forgotten, the denominator is the bottom number on a fraction.
The top number is called the Numerator.

- The number on top shows how many parts there are
  This is called the numerator

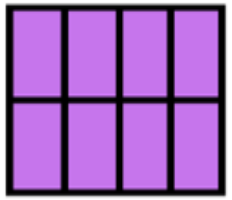
- The number on the bottom shows how many parts something has been divided into
  This is called the denominator.

$$\frac{1}{2}$$

When adding fractions with the same denominator we say the calculation has a common denominator. Common denominator means the same denominator.
Watch this video clip to learn more about adding fractions.
https://www.youtube.com/watch?v=rLCheqJh_rQ

Did you notice how the denominator stayed the same and you simply added up the numerators. Can you remember what happens when the numerator and denominator are the same?

When the numerator and denominator are the same. It is a whole. On a shaded shape this would look like this →



$\frac{8}{8}$

The numerator is 8 as all parts (The whole of it) is shaded and the denominator is 8 because there are 8 parts.

Your questions today are a mixture of bars, shapes and part whole models. If you need a reminder of how to use these models to answer questions, take another look at your first sheet from yesterday.

Now its your turn. Complete all the questions on the next page.

1 Complete the additions.

Use the bar models to help you.

a)  $\frac{1}{3} + \frac{1}{3} = \square$

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

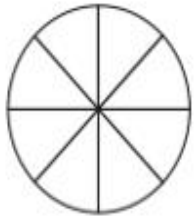
c)  $\frac{1}{5} + \frac{2}{5} = \square$

d)  $\frac{1}{5} + \frac{3}{5} = \square$

2 Shade the circles and complete the additions.

a) 

$\frac{1}{8} + \frac{3}{8} = \square$ (8)

b) 

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

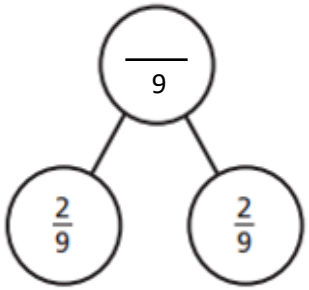
c) 

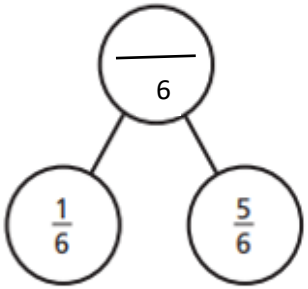
$\frac{3}{8} + \frac{3}{8} = \square$

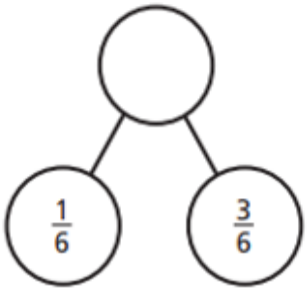
d) 

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

3 Complete the part-whole models.

a) 

c) 

b) 

Which part-whole model is the odd one out? Why?

_____

_____

Day 3 – 24.2.21

Add 2 or more fractions

Use the knowledge you learnt yesterday to answer today's addition questions. Bars have been added alongside some of the questions to help support you to answer the calculations.

1 Complete the additions.

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

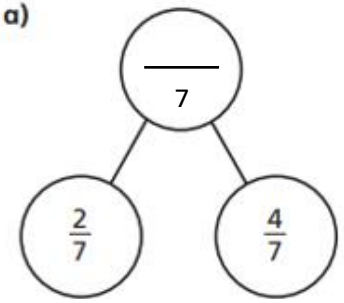
b)  $\frac{1}{5} + \frac{3}{5} = \square$

c)  $\frac{3}{8} + \frac{3}{8} = \square$

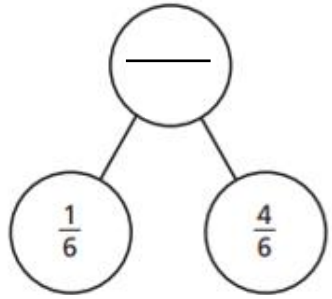
d)  $\frac{3}{8} + \frac{1}{8} = \square$

2 Complete the part-whole models.

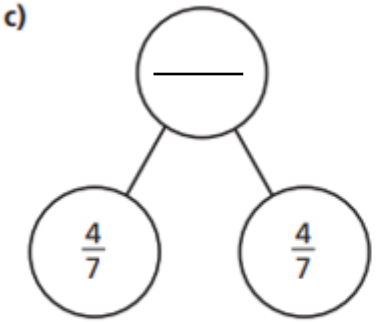
a)

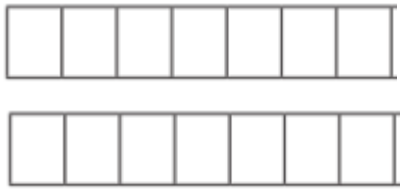


b)



c)





d) Which part-whole model is the odd one out?

Explain how you know.

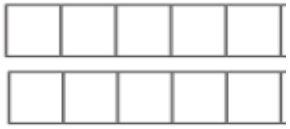
_____

_____

3 Complete the additions.

a) $\frac{3}{7} + \frac{3}{7} = \square$

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

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

Day 4 - 25.2.21 You may need to refer to this sheet after half term so make sure you keep it handy and don't throw it away.

Subtract fractions

Today you will be subtracting fractions with the same denominator (Common Denominator). Just like with addition, the denominator in all the questions will stay the same. Only the numerator will change. When you add fractions, you add the numerators together. When you subtract fractions, you subtract the smaller numerator from the bigger one.
Watch this video clip to learn more about subtracting fractions.
https://www.youtube.com/watch?v=x-6h5ZOKHtg

Subtraction using a bar model
Let's look at the calculation $\frac{3}{5} - \frac{2}{5}$

When you subtract using a bar model you firstly need to count the total number of parts to find the denominator. This model has 5 parts so the denominator is 5.

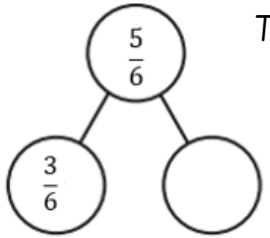
You then need to count the shaded parts to find out what number you are subtracting from.
In this case 3 parts are shaded. As a fraction this is $\frac{3}{5}$

Our calculation asked us to subtract $\frac{2}{5}$ from $\frac{3}{5}$ so our last step is to simply cross off the number of parts we are subtracting to find our answer. Like this

As you can see, we are left with just one shaded part so

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

Sometimes we use part whole models to subtract. Let's go through an example together



This part whole model shows $\frac{5}{6} - \frac{3}{6}$

On a bar model it would look like this.

You take the fraction at the top of the part whole model and subtract the fraction in the bottom part of the part whole model. Remember it is only the numerator that changes, not the denominator. The denominator stays the same.

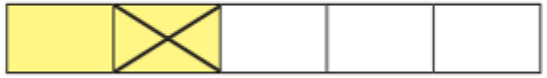
So the missing part of the part whole model is $\frac{2}{6}$

Hopefully you are now ready to start having a go yourself.
Complete all the questions on the next page.
Once again bars have been added alongside some of the questions to help you answer the subtraction calculations

1 Complete the subtractions.

Use the bar models to help you.

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

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

c)  $\frac{3}{5} - \frac{1}{5} = \square$

d)  $\frac{4}{5} - \frac{1}{5} = \square$

2 Jack has $\frac{7}{8}$ of a chocolate bar.

He eats $\frac{4}{8}$ of the chocolate bar.

What fraction of the chocolate bar does he have left?

Jack has $\frac{\square}{\square}$ of the chocolate bar left.

3 Complete the subtractions.

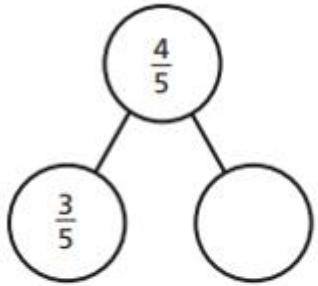
a) $\frac{7}{10} - \frac{1}{10} = \square$ 

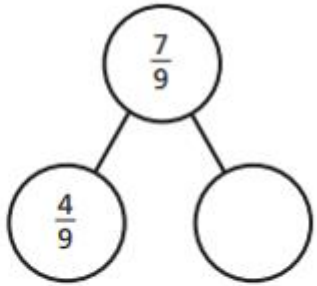
b) $\frac{7}{10} - \frac{2}{10} = \square$ 

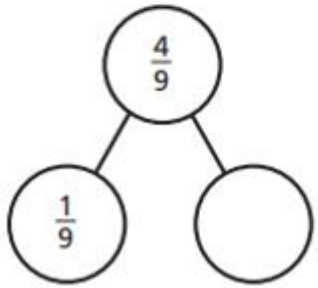
c) $\frac{7}{10} - \frac{3}{10} = \square$ 

d) $\frac{7}{12} - \frac{3}{12} = \square$ 

4 Complete the part-whole models.

a) 

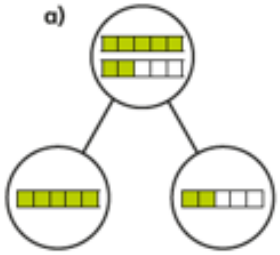
c) 

b) 

Fractions greater than 1

1 Complete the sentences.

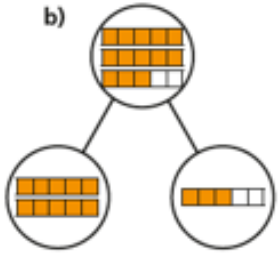
a)



There are 7 fifths altogether.

7 fifths = [1] whole + [2] fifths

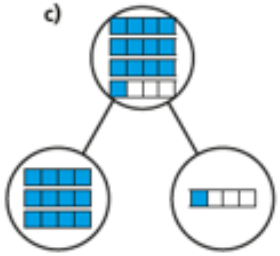
b)



There are [13] fifths altogether.

[13] fifths = [2] wholes + [3] fifths

c)



There are [13] quarters altogether.

[13] quarters = [3] wholes + [1] quarter

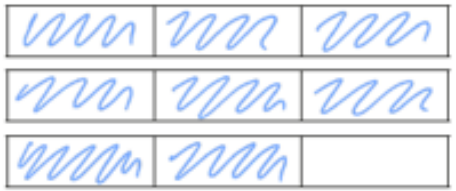
2 Shade the bar models to represent the fractions.

Complete the number sentences.

a) $\frac{5}{3}$

$\frac{5}{3}$ = [1] whole + [2] thirds = [$1\frac{2}{3}$]

b) $\frac{8}{3}$



$\frac{8}{3}$ = [2] wholes + [2] thirds = [$2\frac{2}{3}$]

c) $\frac{8}{5}$

$\frac{8}{5}$ = [1] whole + [3] fifths = [$1\frac{3}{5}$]

Day 2 Answers

Add fractions

White Rose Maths

1 Complete the additions.

Use the bar models to help you.

a) 

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

b) 

$\frac{1}{5} + \frac{1}{5} = \frac{2}{5}$

c) 

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

d) 

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

2 Shade the circles and complete the additions.

a) 

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

b) 

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

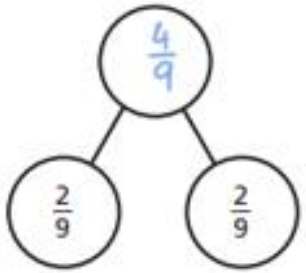
c) 

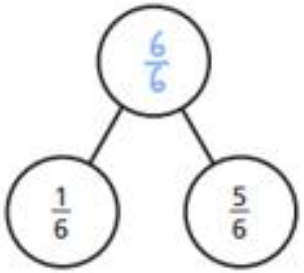
$\frac{3}{8} + \frac{3}{8} = \frac{6}{8}$

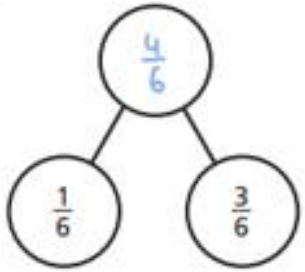
d) 

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

3 Complete the part-whole models.

a) 

c) 

b) 

Which part-whole model is the odd one out? Why?

C because it makes a whole

Day 3 Answers

Add 2 or more fractions

Use the knowledge you learnt yesterday to answer today's addition questions. Bars have been added alongside some of the questions to help support you to answer the calculations.

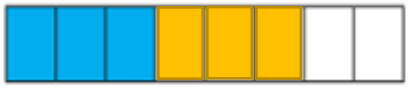
1 Complete the additions.

a) 

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

b) 

$\frac{1}{5} + \frac{3}{5} = \boxed{\frac{4}{5}}$

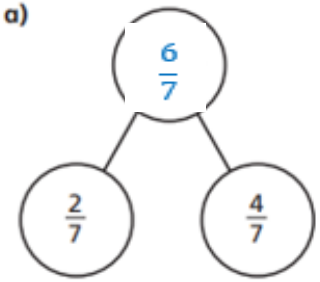
c) 

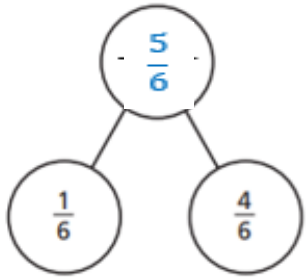
$\frac{3}{8} + \frac{3}{8} = \boxed{\frac{6}{8}}$

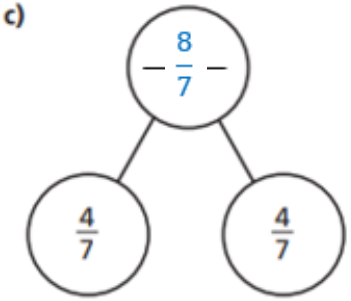
d) 

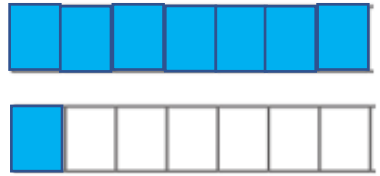
$\frac{3}{8} + \frac{1}{8} = \boxed{\frac{4}{8}}$

2 Complete the part-whole models.

a) 

b) 

c) 



d) Which part-whole model is the odd one out?

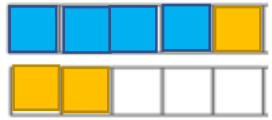
Explain how you know.

C because it is more than a whole. I know because the numerator is bigger than the denominator.

3 Complete the additions.

a) $\frac{3}{7} + \frac{3}{7} = \boxed{\frac{6}{7}}$

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

c) $\frac{4}{5} + \frac{3}{5} = \boxed{\frac{7}{5}} = \boxed{1\frac{2}{5}}$ 

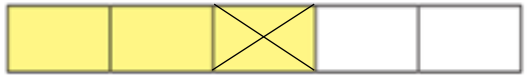
Day 4 Answers

1 Complete the subtractions.

Use the bar models to help you.

a)  $\frac{2}{3} - \frac{1}{3} = \boxed{\frac{1}{3}}$

b)  $\frac{2}{5} - \frac{1}{5} = \boxed{\frac{1}{5}}$

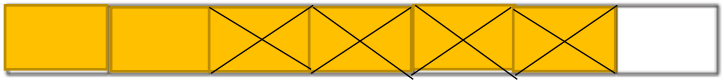
c)  $\frac{3}{5} - \frac{1}{5} = \boxed{\frac{2}{5}}$

d)  $\frac{4}{5} - \frac{1}{5} = \boxed{\frac{3}{5}}$

2 Jack has $\frac{7}{8}$ of a chocolate bar.

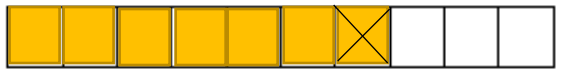
He eats $\frac{4}{8}$ of the chocolate bar.

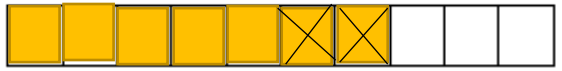
What fraction of the chocolate bar does he have left?

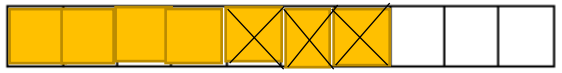


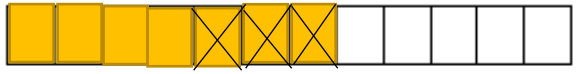
Jack has $\boxed{\frac{3}{8}}$ of the chocolate bar left.

3 Complete the subtractions.

a) $\frac{7}{10} - \frac{1}{10} = \boxed{\frac{6}{10}}$ 

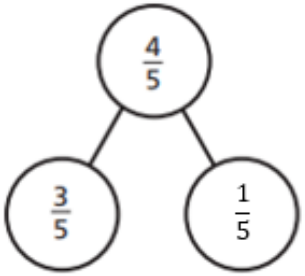
b) $\frac{7}{10} - \frac{2}{10} = \boxed{\frac{5}{10}}$ 

c) $\frac{7}{10} - \frac{3}{10} = \boxed{\frac{4}{10}}$ 

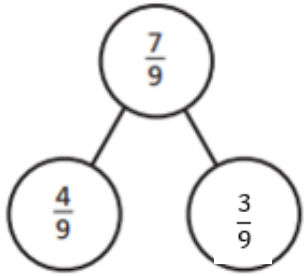
d) $\frac{7}{12} - \frac{3}{12} = \boxed{\frac{4}{12}}$ 

4 Complete the part-whole models.

a)



c)



b)