# Fractions – Week 4

## Answers

# Monday 18th May 2020

# L.O. I am learning to order and compare fractions.

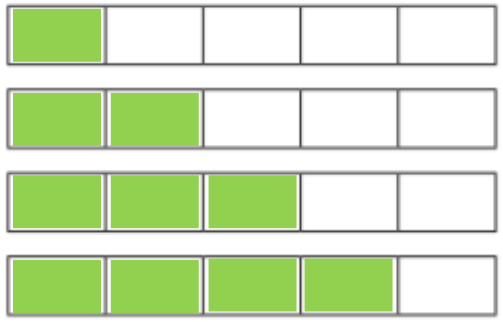
**Key vocabulary:** fraction equal compare greater than less than **numerator denominator**

**Check your answers.**

If you make a mistake, try and work out where it went wrong.

# Order fractions

**1** a) Shade the bar models to represent the fractions.



$\frac{1}{5}$

$\frac{2}{5}$

$\frac{3}{5}$

$\frac{4}{5}$

b) What do you notice?

The denominator doesn't change, but as the **numerator gets bigger** we shade **more of the bar**.

c) Complete the sentence.

numerator | denominator | greater | smaller

When fractions have the same denominator, the greater the numerator the greater the fraction.

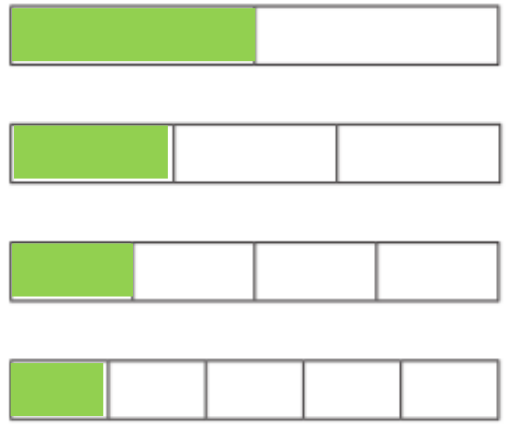
**2** Write the fractions in order, starting with the smallest.

$\frac{1}{9}$ $\frac{8}{9}$ $\frac{4}{9}$ $\frac{2}{9}$ $\frac{7}{9}$

$\frac{1}{9}$ $\frac{2}{9}$ $\frac{4}{9}$ $\frac{7}{9}$ $\frac{8}{9}$

smallest greatest

**3** a) Shade the bar models to represent the fractions.



$\frac{1}{2}$

$\frac{1}{3}$

$\frac{1}{4}$

$\frac{1}{5}$

b) What do you notice?

The numerator doesn't change, but as the **denominator gets bigger** we shade **less of the bar**.

c) Complete the sentence.

numerator | denominator | greater | smaller

When fractions have the same numerator, the greater the denominator the smaller the fraction.

**4** Write the fractions in order, starting with the greatest.

$\frac{1}{9}$ $\frac{1}{3}$ $\frac{1}{7}$ $\frac{1}{2}$ $\frac{1}{11}$

$\frac{1}{2}$ $\frac{1}{3}$ $\frac{1}{7}$ $\frac{1}{9}$ $\frac{1}{11}$

greatest smallest

**Check your answers.**

If you make a mistake, try and work out where it went wrong.

**5** Tommy and Dora are ordering fractions.

$\frac{1}{5}$ $\frac{4}{15}$ $\frac{2}{3}$ $\frac{7}{15}$

I cannot order these fractions because the numerators and denominators are different.

Tommy

I think I can use equivalent fractions to help me.

Dora

Who do you agree with? Dora

Talk about it with a partner.

**6** **a)** Complete the equivalent fractions.

$\frac{3}{5} = \frac{6}{10}$ $\frac{2}{9} = \frac{6}{27}$ $\frac{1}{7} = \frac{6}{42}$

**b)** Write the fractions in order, starting with the greatest.

$\frac{6}{9}$ $\frac{3}{5}$ $\frac{1}{7}$ $\frac{2}{9}$

$\frac{3}{5}$ $\frac{6}{9}$ $\frac{2}{9}$ $\frac{1}{7}$

greatest smallest

# Check your answers.

If you make a mistake, try and work out where it went wrong.

**Circles:** Either 7 or 8 parts shaded.

**Squares:** Either 2 and 1 parts shaded

*OR*

1 and 0 parts shaded.

**Any of the answers below:**

$\frac{1}{3}$ $\frac{1}{4}$ $\frac{1}{5}$ $\frac{1}{6}$ $\frac{1}{7}$ $\frac{1}{8}$ $\frac{1}{9}$

$\frac{3}{5}$ is the largest- when the numerators are the same, the smaller the denominator the larger the fraction. Children could also explain that $\frac{3}{5}$ is the only fraction larger than a half.

$\frac{1}{8}$ is the smallest- when the denominators are the same, the smaller the numerator, the smaller the fraction.

# Tuesday 19th May 2020

# L.O. I am learning to add fractions.

**Key vocabulary:** fraction equal equivalent add **numerator** **denominator**

**Check your answers.**

If you make a mistake, try and work out where it went wrong.

# Add fractions

**1** Complete the additions.

Use the bar models to help you.

a) 

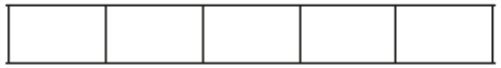
$\frac{1}{3} + \frac{1}{3} = \boxed{\frac{2}{3}}$

b) 

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

c) 

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

d) 

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

**2** Shade the circles and complete the additions.

a) 

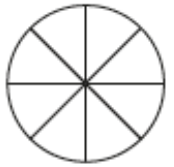
$\frac{1}{8} + \frac{3}{8} = \boxed{\frac{4}{8}}$

4 parts shaded

b) 

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

6 parts shaded

c) 

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

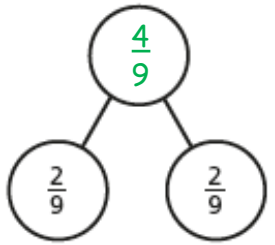
6 parts shaded

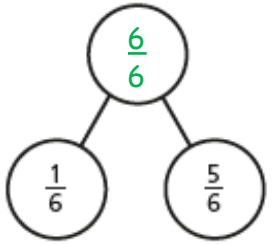
d) 

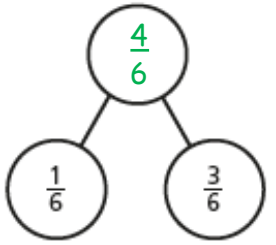
$\frac{5}{8} + \frac{3}{8} = \boxed{\frac{8}{8}}$ Or 1 whole

8 parts shaded

**3** Complete the part-whole models.

a) 


c) 


b) 


Which part-whole model is the odd one out? Any which you can explain

Talk about your choice with a partner. Did they choose the same odd one out?

## Check your answers.

If you make a mistake, try and work out where it went wrong.

**4** Alex and Huan are eating a cake.

Alex eats $\frac{4}{7}$ of the cake.

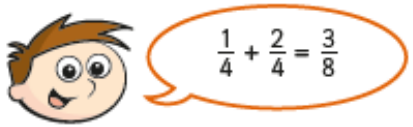
Huan eats $\frac{2}{7}$ of the cake.

What fraction of the cake have they eaten altogether?

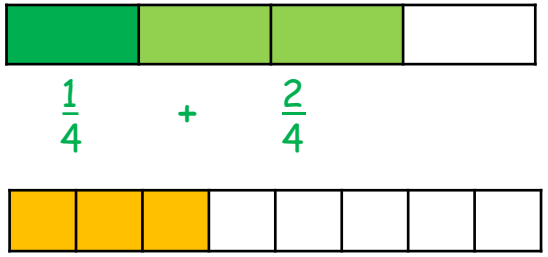
$\frac{4}{7} + \frac{2}{7} = \frac{6}{7}$

They have eaten $\boxed{\frac{6}{7}}$ of the cake altogether.

**5** Teddy is adding fractions.




**a)** Draw a bar model to show that Teddy is wrong.




**b)** Complete the addition $\frac{1}{4} + \frac{2}{4} = \boxed{\frac{3}{4}}$

**6** Annie has baked 12 muffins.

She puts them into 2 boxes.

What fraction of the muffins could she put in each box?

Complete the table to show different possibilities.

One has been done for you.

| Box 1 | Box 2 |
|---|---|
| $\frac{1}{12}$ | $\frac{11}{12}$ |
| $\frac{2}{12}$ | $\frac{10}{12}$ |
| $\frac{3}{12}$ | $\frac{9}{12}$ |
| $\frac{4}{12}$ | $\frac{8}{12}$ |
| $\frac{5}{12}$ | $\frac{7}{12}$ |
| $\frac{6}{12}$ | $\frac{6}{12}$ |

Are there any other possibilities? Talk about it with a partner.

**7** Complete the additions.

**a)** $\frac{3}{8} + \frac{4}{8} = \boxed{\frac{7}{8}}$

**b)** $\frac{3}{9} + \frac{4}{9} = \boxed{\frac{7}{9}}$

**c)** $\frac{3}{29} + \frac{4}{29} = \boxed{\frac{7}{29}}$

**d)** $\frac{3}{103} + \frac{4}{103} = \boxed{\frac{7}{103}}$

**e)** $\frac{5}{31} + \frac{9}{31} = \boxed{\frac{14}{31}}$

**f)** $\frac{17}{111} + \frac{33}{111} = \boxed{\frac{50}{111}}$

# Check your answers.

If you make a mistake, try and work out where it went wrong.

$\frac{1}{5} + \frac{2}{5} = \frac{3}{5}$ $\frac{2}{7} + \frac{3}{7} + \frac{1}{7} = \frac{6}{7}$ $\frac{7}{10} + \frac{2}{10} = \frac{9}{10}$

Rosie is correct. Whitney has made the mistake of also adding the denominators. Children could prove why Whitney is wrong using a bar model or strip diagram.

Possible answers:

$\frac{1}{12} + \frac{11}{12}$

$\frac{3}{12} + \frac{9}{12}$

$\frac{5}{12} + \frac{7}{12}$

(In either order)

# Wednesday 20th May 2020

# L.O. I am learning to subtract fractions.

**Key vocabulary:** fraction equal equivalent subtract **numerator** **denominator**

**Check your answers.**

If you make a mistake, try and work out where it went wrong.

# Subtract fractions

**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?

$\frac{7}{8} - \frac{4}{8} = \frac{3}{8}$

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

**3** Complete the subtractions.

Simplify your answers where possible.

a) $\frac{7}{10} - \frac{1}{10} = \boxed{\frac{6}{10}} = \boxed{\frac{3}{5}}$

b) $\frac{7}{10} - \frac{2}{10} = \boxed{\frac{5}{10}} = \boxed{\frac{1}{2}}$

c) $\frac{7}{10} - \frac{3}{10} = \boxed{\frac{4}{10}} = \boxed{\frac{2}{5}}$

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

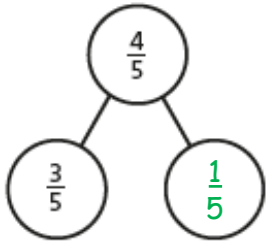
e) $\frac{8}{12} - \frac{4}{12} = \boxed{\frac{4}{12}} = \boxed{\frac{1}{3}}$

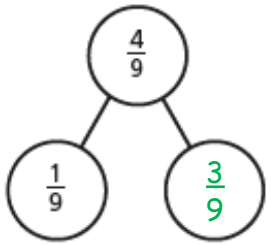
f) $\frac{9}{12} - \frac{5}{12} = \boxed{\frac{4}{12}} = \boxed{\frac{1}{3}}$

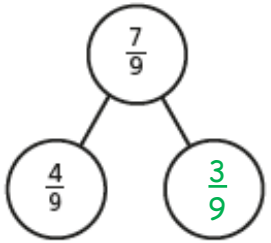
g) $\frac{9}{59} - \frac{5}{59} = \boxed{\frac{4}{59}}$

h) $\frac{13}{127} - \frac{9}{127} = \boxed{\frac{4}{127}}$

**4** Complete the part-whole models.

a) 

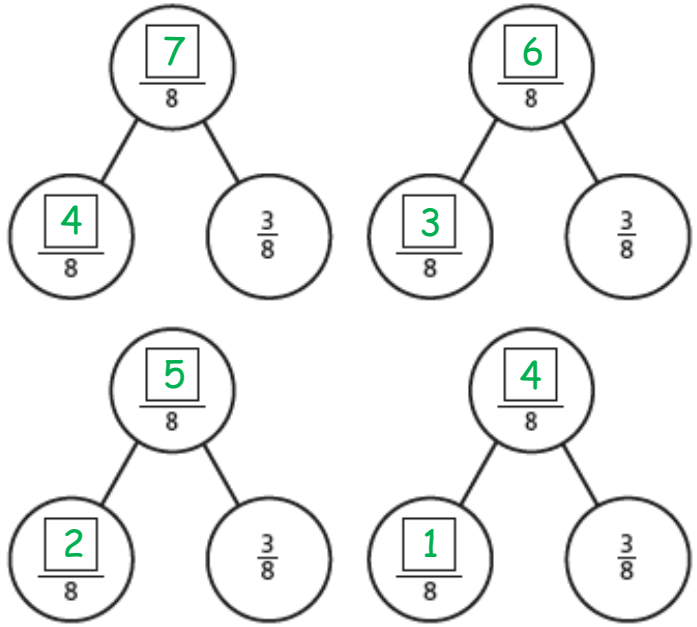

b) 


c) 

## Check your answers.

If you make a mistake, try and work out where it went wrong.

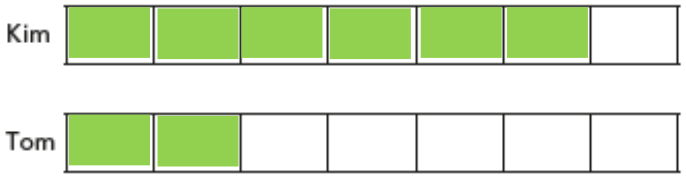
**5** Complete the part-whole model in four different ways.




**6** Kim has read $\frac{6}{7}$ of her book.

Tom has read $\frac{2}{7}$ of his book.

**a)** Shade the bar models to represent this information.




**b)** How much more has Kim read than Tom?

Kim has read $\boxed{\frac{4}{7}}$ more of her book than Tom.

**7** Write the missing numerators.

**a)** $\frac{8}{9} - \frac{\boxed{1}}{9} = \frac{7}{9}$

**b)** $\frac{5}{11} - \frac{\boxed{1}}{11} = \frac{4}{11}$

**c)** $\frac{8}{9} - \frac{\boxed{1}}{9} = \frac{3}{9} + \frac{4}{9}$

**d)** $\frac{7}{9} - \frac{5}{9} = \frac{\boxed{6}}{9} - \frac{4}{9}$

**e)** $\frac{7}{10} - \frac{5}{10} = \frac{1}{10} + \frac{\boxed{1}}{10}$

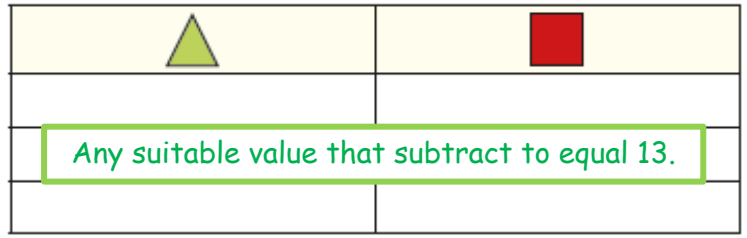
**f)** $\frac{\boxed{3}}{4} - \frac{1}{4} = \frac{1}{4} + \frac{1}{4}$

**g)** $\frac{\boxed{5}}{5} - \frac{2}{5} = \frac{1}{5} + \frac{2}{5}$

**h)** $\frac{4}{5} + \frac{1}{5} = \frac{3}{7} - \frac{2}{7} + \frac{\boxed{4}}{7}$

**8** Complete the table to show three possible values of the square and triangle.

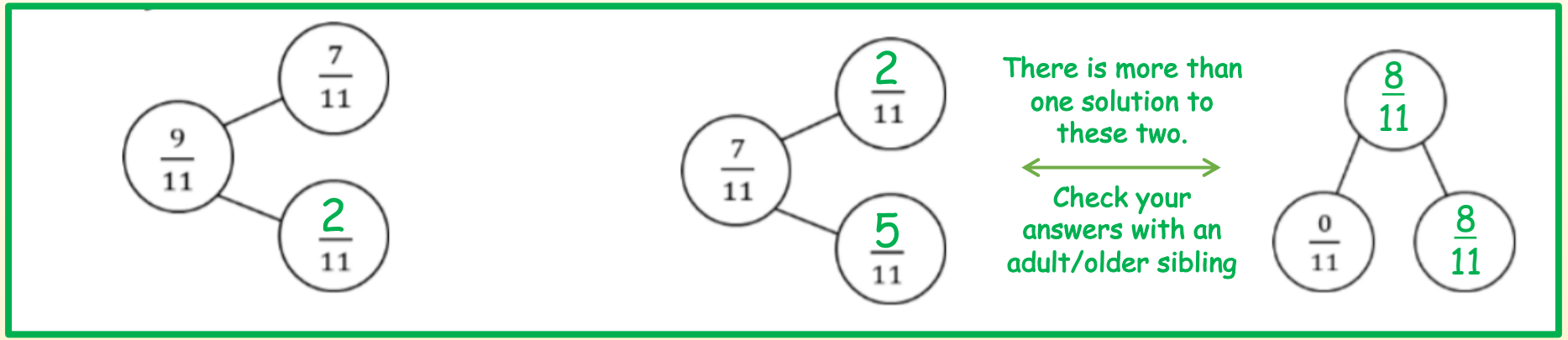
$\frac{\triangle}{92} - \frac{\square}{92} = \frac{13}{92}$




How many other answers can you find?

# Check your answers.

If you make a mistake, try and work out where it went wrong.




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

$$\frac{7}{9} - \frac{5}{9} = \frac{4}{9} - \frac{2}{9}$$

Jack has taken two fifths away. Annie has found the difference between four fifths and two fifths.

# Thursday 21st May 2020

# L.O. I am learning to solve problems involving fractions (1).

**Key vocabulary:** fraction equal equivalent add subtract numerator denominator

I will check your work for you.

Send me your answers on Google Classroom to check.

Or you can write your answers down and send me a photo on Google Classroom, whatever is easier ☺

# Friday 22nd May 2020

# L.O. I am learning to solve problems involving fractions (2).

**Key vocabulary:** fraction equal equivalent add subtract **numerator** **denominator**

I will check your work for you.

Send me your answers on Google Classroom to check.

Or you can write your answers down and send me a photo on Google Classroom, whatever is easier ☺