

Tuesday 2<sup>nd</sup> June 2020

Y4 Maths

Hello Year 4s – For maths today, go to <https://whiterosemaths.com/homelearning/year-4/> Summer Term - Week 6 – Lesson 2 and watch the video ‘Add 2 or more fractions’ before completing the worksheet below.

You learned how to add and subtract fractions with the same denominator earlier in the year so this is a recall task. I have included some reasoning and problem solving activities so you can demonstrate that you have a good understanding (answers at the end) and I have also set a MyMaths task for you to complete.

### Subtract 2 fractions



1 Complete the subtractions.



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



$$\frac{4}{5} - \frac{2}{5} = \square$$



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



$$\frac{7}{9} - \frac{4}{9} = \square$$

2 Complete the calculations.

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

e)  $\frac{9}{11} - \frac{3}{11} = \square$

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

f)  $\frac{6}{7} - \frac{4}{7} = \square$

c)  $\frac{6}{6} - \frac{6}{6} = \square$

g)  $\frac{8}{93} - \frac{2}{93} = \square$

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

h)  $\frac{10}{991} - \frac{3}{991} = \square$

3 Complete the subtractions

a)  $\frac{9}{5} - \frac{6}{5} = \square$

e)  $\frac{8}{3} - \frac{4}{3} = \square = \square$

b)  $\frac{9}{5} - \frac{5}{5} = \square$

f)  $\frac{11}{3} - \frac{4}{3} = \square = \square$

c)  $\frac{9}{5} - \frac{4}{5} = \square = \square$

g)  $\frac{14}{3} - \frac{4}{3} = \square = \square$

d)  $\frac{9}{2} - \frac{4}{2} = \square = \square$

h)  $\frac{15}{3} - \frac{5}{3} = \square = \square$

- 4 Jack has  $2\frac{1}{4}$  kg of potatoes.

He uses  $\frac{5}{4}$  kg of potatoes.

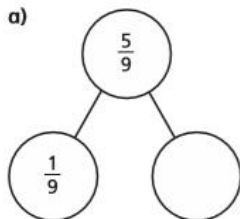
How many kilograms does he have left?



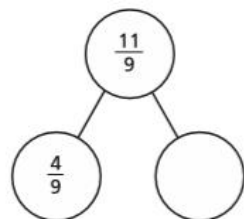
Jack has  kg left.

- 5 Complete the part-whole models.

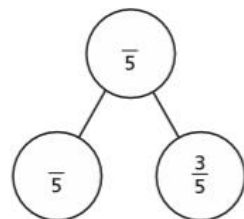
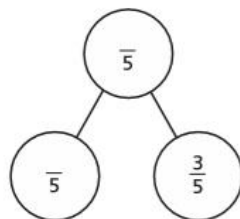
a)



b)



- 6 Complete the part-whole model in two different ways.



- 7 Fill in the missing numerators.

a)  $\frac{10}{11} - \frac{\square}{11} = \frac{7}{11}$

d)  $\frac{15}{4} - \frac{\square}{4} = 2$

b)  $\frac{10}{11} - \frac{\square}{11} = \frac{7}{11} - \frac{4}{11}$

e)  $\frac{9}{4} - \frac{1}{4} = \frac{\square}{4} + 1$

c)  $\frac{10}{11} - \frac{4}{11} = \frac{\square}{11} - \frac{7}{11}$

f)  $\frac{11}{4} - \frac{3}{4} = \frac{11}{3} - \frac{\square}{3}$

- 8 Alex and Annie are taking turns playing a computer game.

Annie plays for a total of  $2\frac{1}{4}$  hours.

Annie plays for  $\frac{3}{4}$  of an hour more than Alex.

How much time do they spend in total playing on the game?

hours

# Subtract 2 Fractions

## Reasoning and Problem Solving

Match the number stories to the correct calculations.

Rachel eats $\frac{7}{8}$ of a pizza. Jenny eats $\frac{4}{8}$ . How much do they eat altogether?	$\frac{7}{8} + \frac{3}{8} = \text{---}$
Rachel eats $\frac{7}{8}$ of a pizza. Jenny eats $\frac{4}{8}$ less. How much do they eat altogether?	$\frac{7}{8} + \frac{4}{8} = \text{---}$
Rachel eats $\frac{7}{8}$ of a pizza. Jenny eats $\frac{3}{8}$ less. How much does Jenny eat?	$\frac{7}{8} - \frac{3}{8} = \text{---}$

How many different ways can you complete the calculations?

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

$$\frac{\square}{7} - \frac{3}{7} = \frac{\square}{7} - \frac{\square}{7}$$

Sally and Jade are working out the answer to this problem.

$$\frac{7}{9} - \frac{3}{9}$$

Sally uses this model.



Jade uses this model.



Which model is correct? Explain why.

Can you write a number story for each model?

# Subtract from Whole Amounts

## Reasoning and Problem Solving

Callie is subtracting a fraction from a whole:

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



Can you spot her mistake?

What should the answer be?

How many ways can you make the statement correct?

$$4 - \frac{\square}{9} > 2\frac{1}{9} + \frac{\square}{9}$$

Zoe and Billy have these digits:

1 2 3 4 5

They are trying to use them to solve:

$$\square - \frac{\square}{\square} = \frac{\square}{\square}$$

Zoe

You can't make it work.



You can make it work.

Billy

Who do you agree with? Explain why

# Answers

## Subtract 2 Fractions

### Reasoning and Problem Solving

Match the number stories to the correct calculations.

Rachel eats $\frac{2}{8}$ of a pizza. Jenny eats $\frac{4}{8}$ . How much do they eat altogether?	$\frac{7}{8} - \frac{3}{8} = \dots$
Rachel eats $\frac{2}{8}$ of a pizza. Jenny eats $\frac{4}{8}$ less. How much do they eat altogether?	$\frac{7}{8} + \frac{4}{8} = \dots$
Rachel eats $\frac{2}{8}$ of a pizza. Jenny eats $\frac{3}{8}$ less. How much does Jenny eat?	$\frac{7}{8} - \frac{3}{8} = \dots$

Rachel eats $\frac{2}{8}$ of a pizza. Jenny eats $\frac{4}{8}$ . How much do they eat altogether?	$\frac{2}{8} + \frac{4}{8} = \dots$
Rachel eats $\frac{2}{8}$ of a pizza. Jenny eats $\frac{4}{8}$ less. How much do they eat altogether?	$\frac{2}{8} - \frac{4}{8} = \dots$
Rachel eats $\frac{2}{8}$ of a pizza. Jenny eats $\frac{3}{8}$ less. How much does Jenny eat?	$\frac{2}{8} - \frac{3}{8} = \dots$

How many different ways can you complete the calculations?

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

$$\frac{\square}{7} - \frac{3}{7} = \frac{\square}{7} - \frac{\square}{7}$$

Children may give a range of answers as long as the calculation for the numerators is correct.

Sally and Jade are working out the answer to this problem.

$$\frac{7}{9} - \frac{3}{9}$$

Sally uses this model.



Jade uses this model.



Which model is correct? Explain why.

Can you write a number story for each model?

They are both correct. The first model shows finding the difference and the second model shows take away.

Ensure number stories show take away (where something is removed) or the difference (comparing two quantities)

## Subtract from Whole Amounts

### Reasoning and Problem Solving

Callie is subtracting a fraction from a whole:

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



Can you spot her mistake?

What should the answer be?

Callie has not recognised the whole number as an improper fraction. The answer is  $2\frac{4}{7}$ .

How many ways can you make the statement correct?

$$4 - \frac{\square}{9} > 2\frac{1}{9} + \frac{\square}{9}$$

Lots of possible Responses. Check numerators make the statement correct.

Zoe and Billy have these digits:

1 2 3 4 5

They are trying to use them to solve:

$$\square - \frac{\square}{\square} = \frac{\square}{\square}$$

Zoe

You can't make it work.



You can make it work.

Billy

Who do you agree with? Explain why

Zoe is correct. You can not place the digits to make the calculation correct. Children could explore which digit they could change to make it correct.