

Summer term week 5 w/b 18th May 2020

<https://whiterosemaths.com/homelearning/year-3/>

Week beginning 20th April lessons 3 and 4

Lesson 3 - Compare fractions

Video player for Lesson 3 - Compare fractions. The video shows three fraction comparison problems using bar models:

- $\frac{4}{8}$ and $\frac{6}{8}$: A bar model with 8 equal parts, 4 green and 4 white. Text: "What's the same and what's different?"
- $\frac{5}{10}$ and $\frac{4}{10}$: A bar model with 10 equal parts, 5 orange and 5 white. Text: "What do you notice?"
- $\frac{2}{4}$ and $\frac{5}{4}$: A bar model with 4 equal parts, 2 blue and 2 white. Text: "What do you notice?"

Video controls show a play button and a progress bar at 17:12.

Get the Activity

Lesson 3 - Y3 Summer Block 1 WQ4 Compare fractions 2020

Get the Answers

Lesson 3 - Y3 Summer Block 1 AN54 Compare fractions 2020

Lesson 4 - Order fractions

Video player for Lesson 4 - Order fractions. The video shows a bar model for $\frac{5}{7}$ and $\frac{2}{7}$. Text: "When the denominators are the same, the greater the numerator, the greater the fraction." Video controls show a play button and a progress bar at 18:12.

Get the Activity

Lesson 4 - Y3 Summer Block 1 WQ5 Order fractions 2020

Get the Answers

Lesson 4 - Y3 Summer Block 1 AN55 Order fractions 2020

Week beginning 27th April lessons 1 and 2

Lesson 1 - Add fractions

Video player for Lesson 1 - Add fractions. The video shows three problems:

- One quarter is equivalent to how many eighths? (Two eighths)
- Jen has run $\frac{3}{5}$ of a 400 metre race. How many more metres does he need to run? (160 metres)
- Write 0.3 as a fraction.

Video controls show a play button and a progress bar at 18:29.

Get the Activity

Lesson 1 - Y3 Summer Block 1 WQ6 Add fractions 2020

Get the Answers

Lesson 1 - Y3 Summer Block 1 AN56 Add fractions 2020

Lesson 2 - Subtract fractions

Video player for Lesson 2 - Subtract fractions. The video shows a problem: "of the people in the crowd at a concert are children. are boys. What fraction are girls?" Video controls show a play button and a progress bar at 17:49.

Get the Activity

Lesson 2 - Y3 Summer Block 1 WQ7 Subtract fractions 2020

Get the Answers

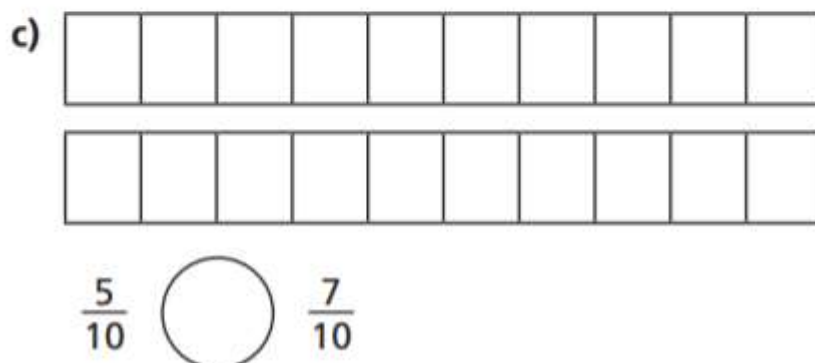
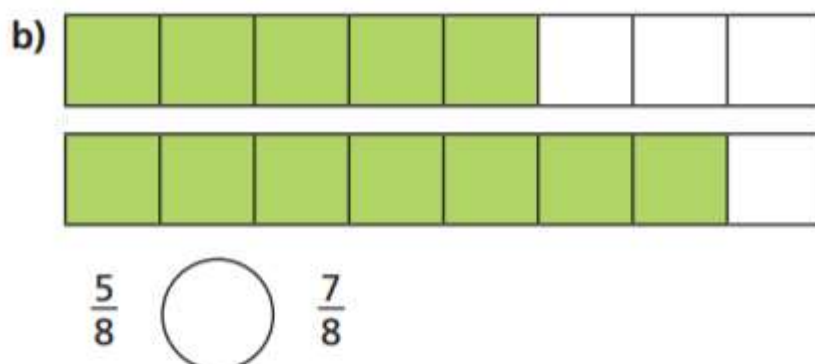
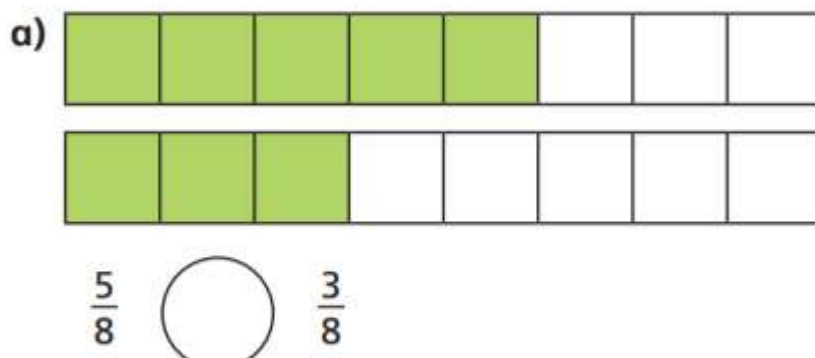
Lesson 2 Y3 Summer Block 1 AN57 Subtract fractions 2020

Lesson 1 activity: Comparing fractions



Write $<$, $>$ or $=$ to compare the fractions.

Use the bar models to help you.



2 Write $<$, $>$ or $=$ to compare the fractions.

a) $\frac{1}{5}$ $\frac{3}{5}$

d) $\frac{6}{7}$ $\frac{2}{7}$

b) $\frac{2}{5}$ $\frac{2}{5}$

e) $\frac{6}{13}$ $\frac{12}{13}$

c) $\frac{2}{7}$ $\frac{6}{7}$

f) $\frac{13}{15}$ $\frac{13}{15}$

3 Here are some bar models.



$\frac{1}{2}$



$\frac{1}{3}$



$\frac{1}{4}$



$\frac{1}{5}$

a) Shade the bar models to represent the fractions.

b) Write $<$ or $>$ to compare the fractions.

Use the bar models to help you.

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

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

$\frac{1}{5}$ $\frac{1}{3}$

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

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

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

4

What could the missing numerators and denominators be?

Give three examples for each.

a) $\frac{1}{5} < \frac{\square}{5}$

$\frac{1}{5} < \frac{\square}{5}$

$\frac{1}{5} < \frac{\square}{5}$

b) $\frac{1}{5} < \frac{1}{\square}$

$\frac{1}{5} < \frac{1}{\square}$

$\frac{1}{5} < \frac{1}{\square}$

5

Jack is comparing fractions.

$\frac{1}{8}$ is greater than $\frac{1}{4}$
because 8 is greater than 4

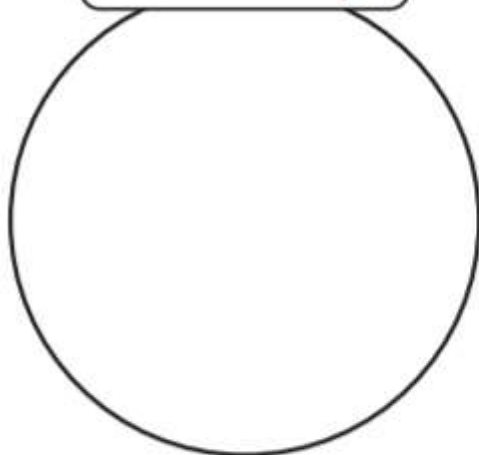


Draw bar models to show that Jack is wrong.

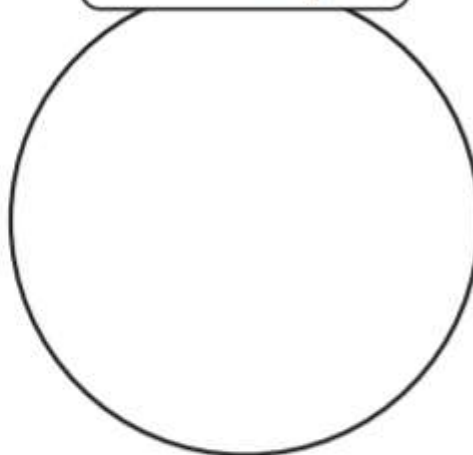
6 Sort the fractions into the circles.

| | | | | | |
|---------------|---------------|---------------|---------------|----------------|---------------|
| $\frac{5}{6}$ | $\frac{1}{8}$ | $\frac{1}{2}$ | $\frac{2}{6}$ | $\frac{1}{12}$ | $\frac{3}{6}$ |
|---------------|---------------|---------------|---------------|----------------|---------------|

greater than $\frac{1}{6}$



less than $\frac{1}{6}$



7 Complete the sentences using the word bank.

numerator

denominator

greater

smaller

a) When fractions have the same denominator, the greater

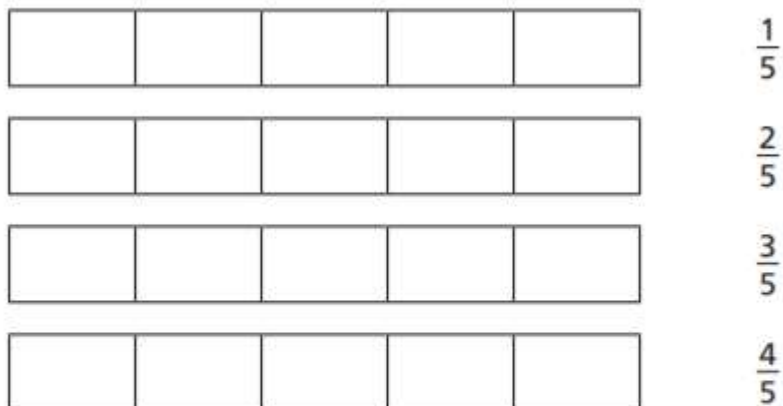
the _____, the _____ the fraction.

b) When fractions have the same numerator, the greater the

_____, the _____ the fraction.

Lesson 2 activity: ordering fractions

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



- b) What do you notice?

- c) Complete the sentence.

numerator

denominator

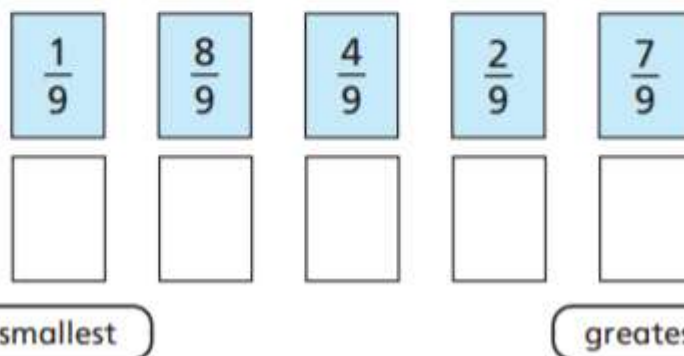
greater

smaller

When fractions have the same _____, the

_____ the _____ the _____
the fraction.

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



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



b) What do you notice?

c) Complete the sentence.

numerator

denominator

greater

smaller

When fractions have the same _____, the
_____ the _____ the _____
the fraction.

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

$\frac{1}{9}$

$\frac{1}{3}$

$\frac{1}{7}$

$\frac{1}{2}$

$\frac{1}{11}$

greatest

smallest

- 5 Tommy and Dora are ordering fractions.

$$\frac{1}{5}$$

$$\frac{4}{15}$$

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

$$\frac{7}{15}$$



Tommy

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

I think I can use equivalent fractions to help me.



Dora

Who do you agree with? _____

Talk about it with a partner.

- 6 a) Complete the equivalent fractions.

$$\frac{3}{5} = \frac{6}{\square}$$

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

$$\frac{1}{7} = \frac{6}{\square}$$

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

$$\frac{6}{9}$$

$$\frac{3}{5}$$

$$\frac{1}{7}$$

$$\frac{2}{9}$$

greatest

smallest

7

Dexter and Alex are ordering fractions from smallest to greatest.

$$\frac{1}{7} \quad \frac{2}{21} \quad \frac{4}{35} \quad \frac{2}{7}$$

a)



I am going to make the numerators the same.

Dexter

Use Dexter's method to put the fractions in order.

b)

I am going to make the denominators the same.



Alex

Use Alex's method to put the fractions in order.


c) Which method do you prefer? Talk about it with a partner.


Lesson 3 activity: add fractions





Complete the additions.

Use the bar models to help you.

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

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

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

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



Shade the circles and complete the additions.

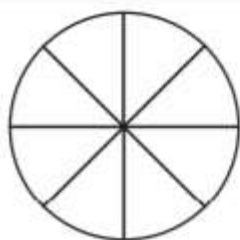


$$\frac{1}{8} + \frac{3}{8} = \boxed{}$$



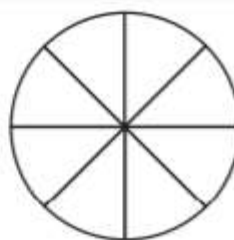
$$\frac{5}{8} + \frac{1}{8} = \boxed{}$$

c)



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

d)

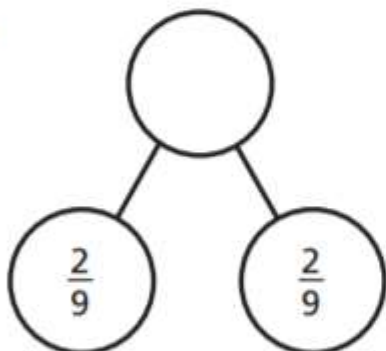


$$\frac{5}{8} + \frac{3}{8} = \boxed{}$$

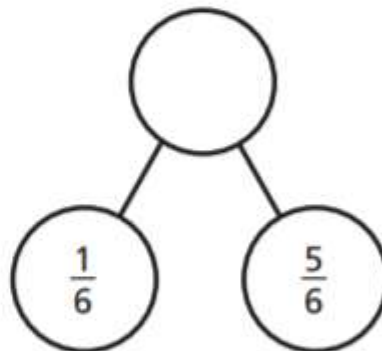
3

Complete the part-whole models.

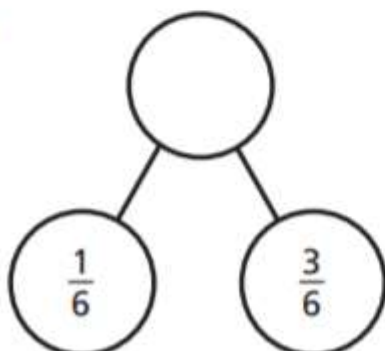
a)



c)



b)



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

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?

They have eaten of the cake altogether.

5

Teddy is adding fractions.



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

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

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 |
|----------------|-----------------|
| $\frac{1}{12}$ | $\frac{11}{12}$ |
| | |
| | |
| | |
| | |
| | |

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

7

Complete the additions.

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

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

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

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


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


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


Lesson 4 activity: subtract fractions


1 Complete the subtractions.

Use the bar models to help you.

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

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

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

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

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 of the chocolate bar left.

3

Complete the subtractions.

Simplify your answers where possible.

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

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

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

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

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

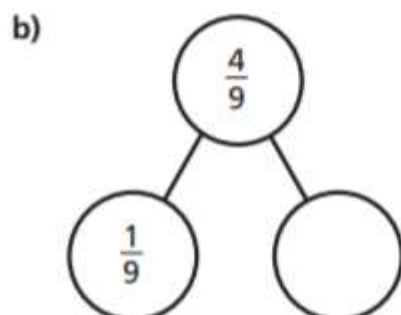
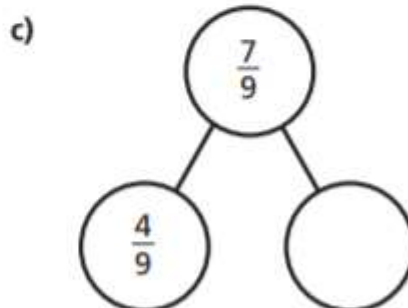
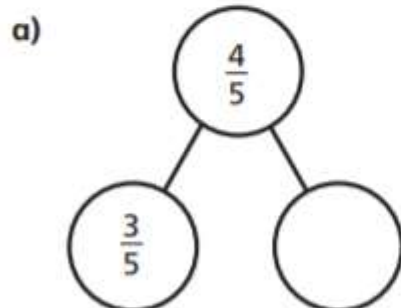
g) $\frac{9}{59} - \frac{5}{59} = \boxed{}$

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

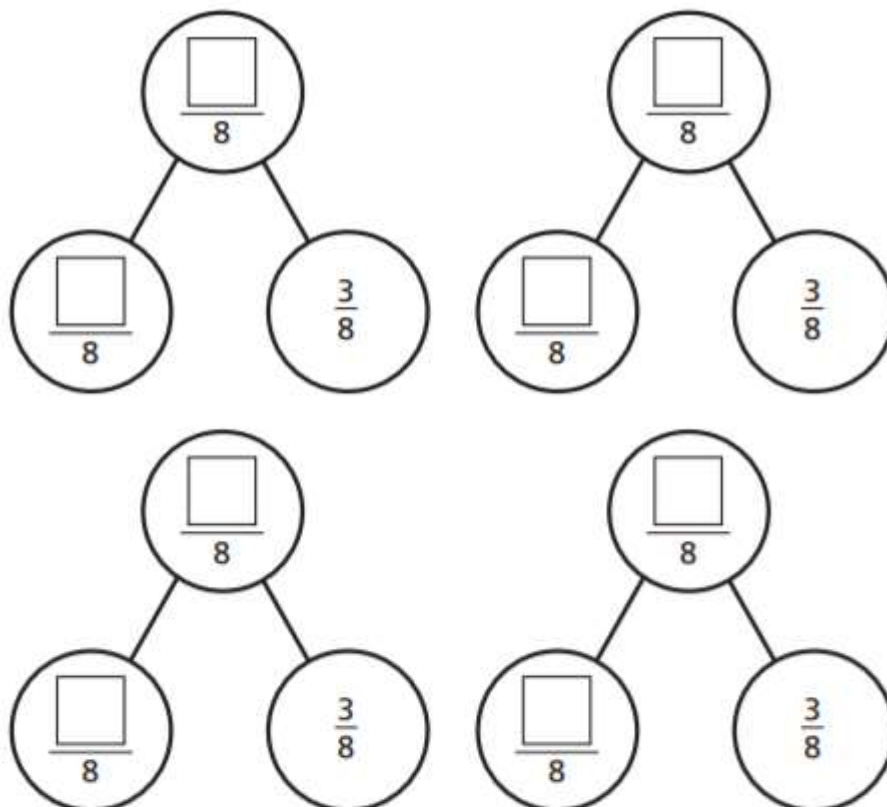
h) $\frac{13}{127} - \frac{9}{127} = \boxed{}$

4

Complete the part-whole models.



- 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

 more of her book than Tom.

7

Write the missing numerators.

$$\text{a) } \frac{8}{9} - \frac{\square}{9} = \frac{7}{9}$$

$$\text{e) } \frac{7}{10} - \frac{5}{10} = \frac{1}{10} + \frac{\square}{10}$$

$$\text{b) } \frac{5}{11} - \frac{\square}{11} = \frac{4}{11}$$

$$\text{f) } \frac{\square}{4} - \frac{1}{4} = \frac{1}{4} + \frac{1}{4}$$

$$\text{c) } \frac{8}{9} - \frac{\square}{9} = \frac{3}{9} + \frac{4}{9}$$

$$\text{g) } \frac{\square}{5} - \frac{2}{5} = \frac{1}{5} + \frac{2}{5}$$



$$\text{d) } \frac{7}{9} - \frac{5}{9} = \frac{\square}{9} - \frac{4}{9}$$

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

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?

