

Name: \_\_\_\_\_

## Lesson 2

## Adding Fractions with Like Denominators



## My Learning Goals

I can model fraction addition by joining quantities on a number line.

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I can decompose a fraction to count on with unit fractions.

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I can solve word problems involving addition of fractions.

**Activate** Building with Bars

➤ Use the fourths fraction bars to answer each question.

- 1 Which fraction bars do you and your partner have?
- 2 Determine the sum of the fractions represented by your bar and your partner's bar.

➤ Use the eighths fraction bars to answer each question.

- 3 Which fraction bars do the members of your group have?
- 4 Choose different pairs of fraction bars and determine their sum. Write at least two different sums.

**Explore** Adding Fractions on the Open Number Line

➤ Use an open number line to determine each sum.

$$1 \quad \frac{7}{8} + \frac{5}{8} = \frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}}$$



$$2 \quad \frac{3}{5} + \frac{2}{5} = \frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}}$$

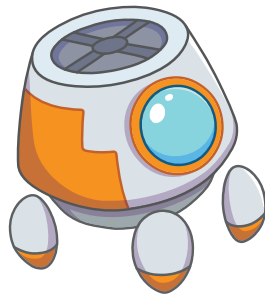


$$3 \quad \frac{7}{12} + \frac{4}{12} = \frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}}$$



$$4 \quad \frac{4}{6} + \frac{4}{6} = \frac{\boxed{\phantom{000}}}{\boxed{\phantom{000}}}$$





Sometimes, I like to use 1 jump to add. Other times, I like to use more than 1 jump.

5  $\frac{1}{10} + \frac{5}{10} = \frac{\square}{\square}$



6  $\frac{9}{100} + \frac{7}{100} = \frac{\square}{\square}$



7  $\frac{8}{12} + \frac{3}{12} = \frac{\square}{\square}$



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



**Explore** Decomposing Fractions and Adding Fractions with Like Denominators

➤ Answer the question. Then, explain your reasoning.



- 1 Elijah says that  $\frac{5}{8}$  can be written as  $\frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$ . Natalie says that  $\frac{5}{8}$  can be written as  $\frac{2}{8} + \frac{3}{8}$ . Who is correct? Explain your reasoning.



➤ Rewrite each fraction as a sum of two or more fractions in at least 2 different ways.

2  $\frac{11}{5}$

3  $\frac{7}{4}$

4  $\frac{9}{10}$

➤ Determine each sum.

$$5 \quad \frac{7}{100} + \frac{8}{100} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

$$6 \quad \frac{7}{12} + \frac{8}{12} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

$$7 \quad \frac{5}{8} + \frac{4}{8} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

$$8 \quad \frac{4}{10} + \frac{9}{10} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

$$9 \quad \frac{2}{5} + \frac{1}{5} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

$$10 \quad \frac{3}{4} + \frac{3}{4} = \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}}$$

➤ Read each story and answer the question.

11 Elijah and Logan remove soil for a ground check. Elijah removes  $\frac{3}{12}$  of the soil. Logan removes  $\frac{6}{12}$  of the soil. How much of the soil do they remove together?

12 On Monday, a company paved  $\frac{5}{10}$  of a road. On Tuesday, it paved  $\frac{2}{10}$  of the road. How much of the road did the company pave in all?

**Reflect** Food Fractions

- Read the story. Then, answer each question.  
Write an equation as part of each solution.

Kaya ate  $\frac{1}{12}$  of a casserole, Avery ate  $\frac{5}{12}$  of it, and Tiago ate  $\frac{6}{12}$  of it.

- 1 How much of the casserole did Kaya and Tiago eat?



- 2 Tiago says he ate more than Kaya and Avery combined.  
Is this correct?



- 3 A friend arrives late to the table. Is there any casserole  
left to eat?



- Choose the problem that feels just right for you and fill in the star.