

Grade 4 Unit 3

Lesson 6

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Unit 3 Lesson 6: Problems with Equal Groups of Fractions**WU True or False: Two and Three Factors (Warm up)**

Student Task Statement

Decide whether each statement is true or false. Be prepared to explain your reasoning.

- $\frac{10}{12} = 5 \times \frac{2}{12}$
- $1 \times \frac{10}{12} = 5 \times \frac{2}{12}$
- $\frac{24}{4} = 6 \times 3 \times \frac{1}{4}$
- $12 \times 2 \times \frac{1}{4} = 8 \times 3 \times \frac{1}{4}$

1 Banana Bread Recipe

Student Task Statement

A bakery is making banana bread. Here is the recipe for 1 batch.

Recipe:

- 1 banana
- $\frac{2}{3}$ cup butter
- $\frac{3}{2}$ teaspoons baking soda
- $\frac{5}{8}$ cup sugar
- 2 large eggs
- $\frac{5}{2}$ cups of all-purpose flour



1. The bakery makes 2 batches of banana bread on Monday. Complete the table to show how much of each ingredient is used.

Monday's banana bread

| ingredient | expression | amount of ingredient |
|-------------|------------|----------------------|
| bananas | | _____ |
| butter | | _____ cup(s) |
| baking soda | | _____ teaspoon(s) |
| sugar | | _____ cup(s) |
| eggs | | _____ |
| flour | | _____ cup(s) |

2. On Tuesday, the bakery needs $\frac{8}{3}$ cups of butter to make enough banana bread for the day. How many batches were made? Explain or show your reasoning.

Recipe:

- 1 banana
- $\frac{2}{3}$ cup butter
- $\frac{3}{2}$ teaspoons baking soda
- $\frac{5}{8}$ cup sugar
- 2 large eggs
- $\frac{5}{2}$ cups of all-purpose flour

3. Based on the number of the batches made on Tuesday, complete the table for each ingredient.

Tuesday's banana bread

| ingredient | expression | amount of ingredient |
|------------|------------|----------------------|
| bananas | | _____ |
| butter | | $\frac{8}{3}$ cups |

| ingredient | expression | amount of ingredient |
|-------------|------------|----------------------|
| baking soda | | _____ teaspoon(s) |
| sugar | | _____ cup(s) |
| eggs | | _____ |
| flour | | _____ cup(s) |

2 How Much Milk Was Used?

Student Task Statement

The bakery that sells banana bread also sells fresh milkshakes. Each serving uses $\frac{1}{10}$ liter of milk.

Here are five descriptions of the milkshakes sold in a week and five expressions that represent the liters of milk used.



Match each description to an expression that represents it.

1. On Monday, the bakery sold 8 servings of milkshake. How much milk was used?
2. On Tuesday, two customers bought 4 servings of milkshake each. How much milk was used?
3. On Wednesday, four customers bought 2 servings of milkshake each. How much milk was used?
4. On Thursday, two customers each bought a serving of milkshake. They placed the same order three more times for their friends that day. How much milk was used?
5. On Saturday, four friends each purchased a serving of milkshake for breakfast. They came back for the same after dinner. How much milk was used?

$$4 \times (2 \times \frac{1}{10})$$

$$4 \times \frac{2}{10}$$

$$8 \times \frac{1}{10}$$

$$2 \times (4 \times \frac{1}{10})$$

$$2 \times \frac{4}{10}$$