

Unit 3 Lesson 4: What Fraction of a Group?

1 Estimating a Fraction of a Number (Warm up)

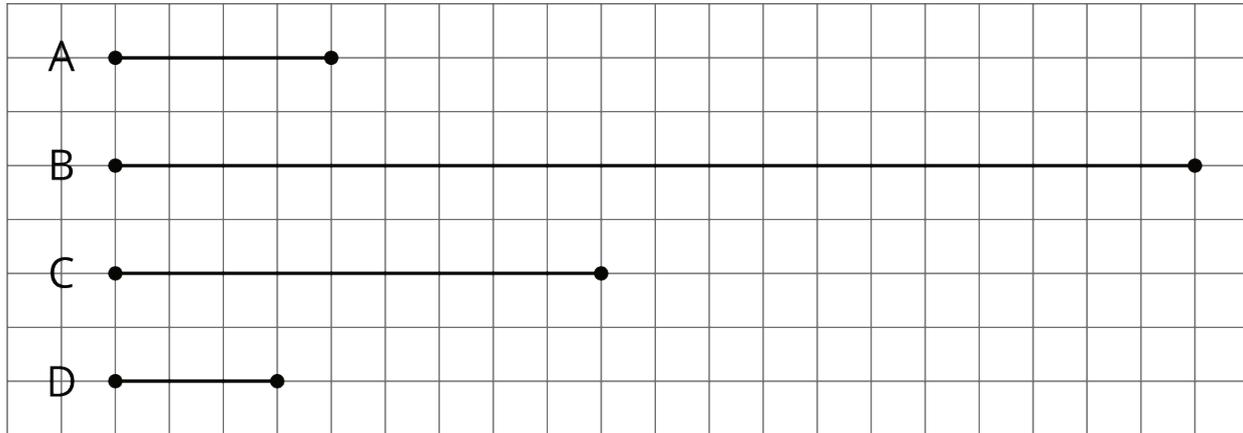
Student Task Statement

1. Estimate the quantities:
 - a. What is $\frac{1}{3}$ of 7?
 - b. What is $\frac{4}{5}$ of $9\frac{2}{3}$?
 - c. What is $2\frac{4}{7}$ of $10\frac{1}{9}$?
2. Write a multiplication expression for each of the previous questions.

2 Fractions of Ropes

Student Task Statement

Here is a diagram that shows four ropes of different lengths.



1. Complete each sentence comparing the lengths of the ropes. Then, use the measurements shown on the grid to write a multiplication equation and a division equation for each comparison.
 - a. Rope B is _____ times as long as Rope A.
 - b. Rope C is _____ times as long as Rope A.
 - c. Rope D is _____ times as long as Rope A.

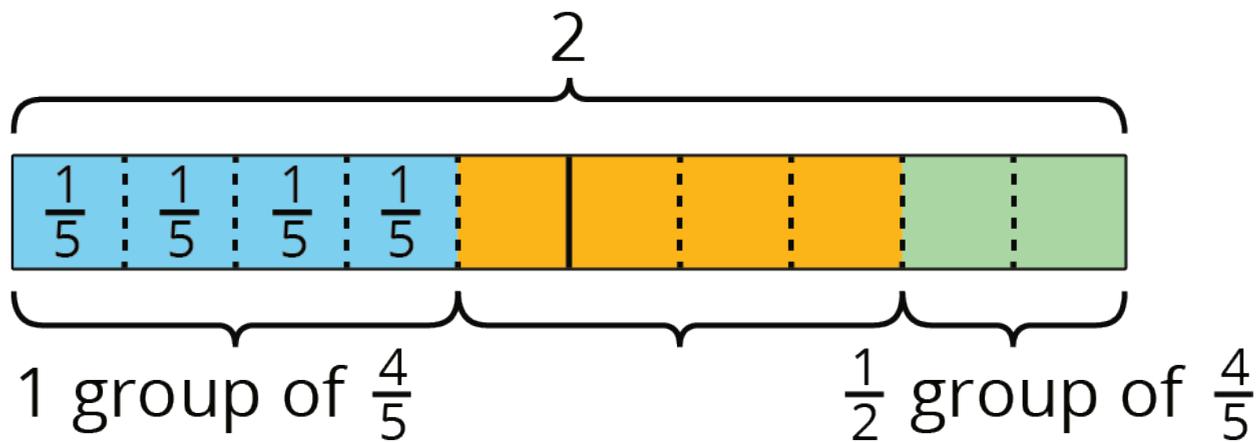
2. Each equation can be used to answer a question about Ropes C and D. What could each question be?

a. $? \cdot 3 = 9$ and $9 \div 3 = ?$

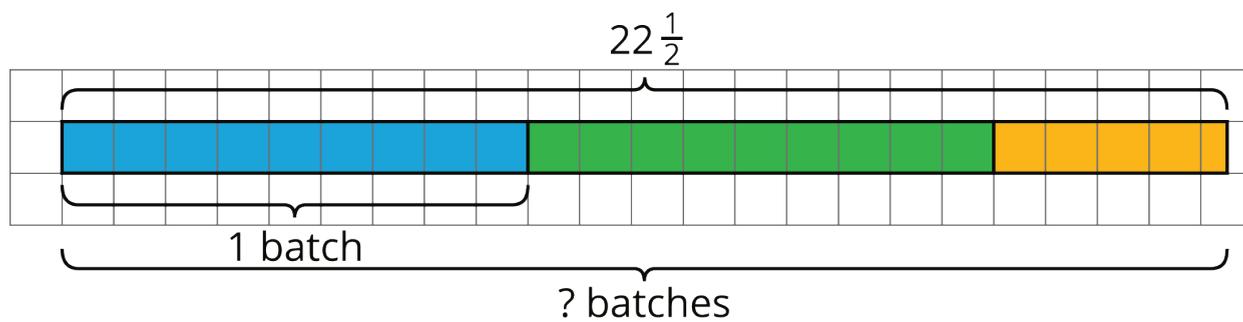
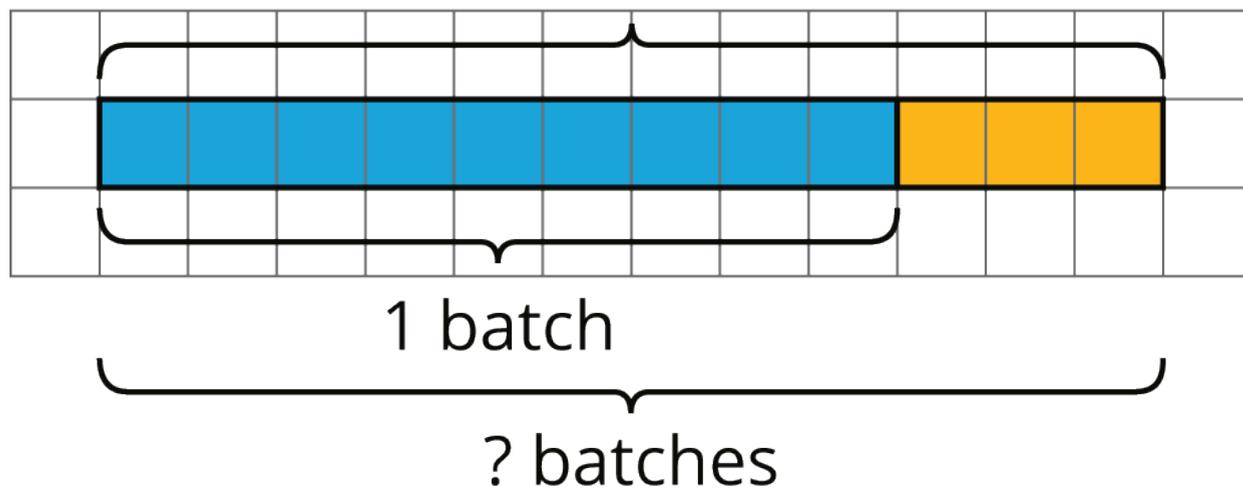
b. $? \cdot 9 = 3$ and $3 \div 9 = ?$

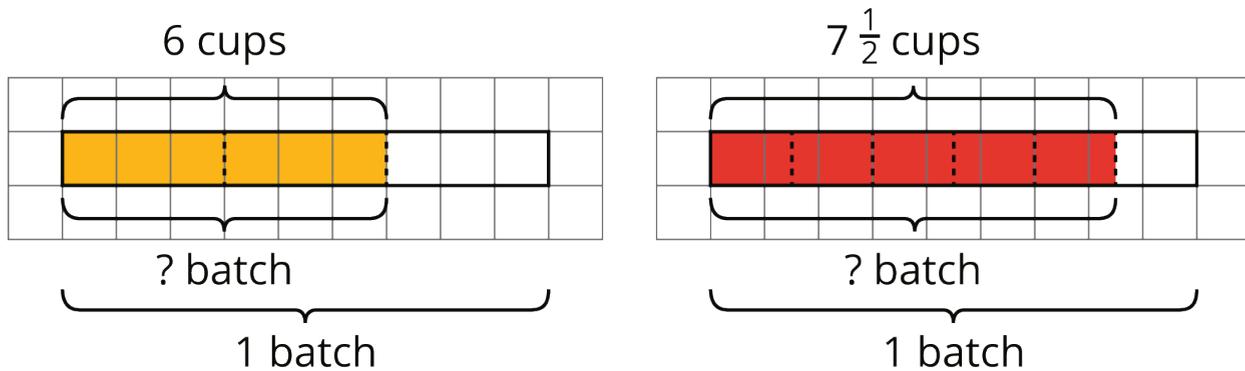
3 Fractional Batches of Ice Cream

Images for Launch



12 cups





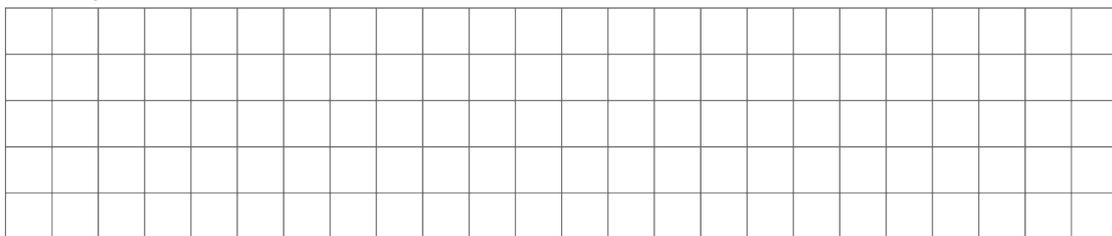
Student Task Statement

One batch of an ice cream recipe uses 9 cups of milk. A chef makes different amounts of ice cream on different days. Here are the amounts of milk she used:

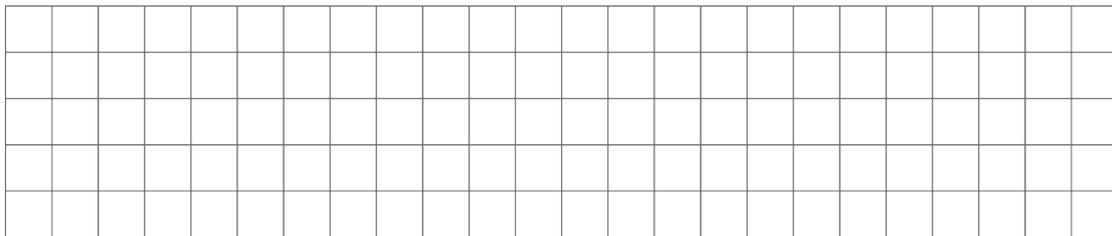
- Monday: 12 cups
- Tuesday: $22\frac{1}{2}$ cups
- Thursday: 6 cups
- Friday: $7\frac{1}{2}$ cups

1. How many batches of ice cream did she make on these days? For each day, write a division equation, draw a tape diagram, and find the answer.

a. Monday



b. Tuesday



2. What fraction of a batch of ice cream did she make on these days? For each day, write a division equation, draw a tape diagram, and find the answer.

a. Thursday

Activity Synthesis

