Illustrative Mathematics

Grade 5 Unit 6 Lesson 12 CC BY 2021 Illustrative Mathematics®

Unit 6 Lesson 12: Solve Problems

WU Estimation Exploration: Large Denominators (Warm up)

Student Task Statement

What is the value of the sum?

$$\frac{3}{17} + \frac{17}{19}$$

Record an estimate that is:

too low	about right	too high

1 Priya's Salad Dressing

Student Task Statement

Priya's Salad Dressing Recipe

- $\frac{3}{4}$ cup olive oil
- $\frac{1}{3}$ cup lemon juice
- $\frac{1}{2}$ cup mustard
- Pinch of salt and pepper
- 1. Priya has $\frac{2}{3}$ cup of olive oil. She is going to borrow some more from her neighbor. How much olive oil does she need to borrow to have enough to make the dressing?
- 2. 1 tablespoon is equal to $\frac{1}{16}$ of a cup. Priya decides that 1 tablespoon of olive oil is close enough to what she needs to borrow from her neighbor. Do you agree with Priya? Explain or show your reasoning.
- 3. Priya says her recipe will make about $1\frac{1}{2}$ cups of dressing. Do you agree? Explain or show your reasoning.

2 More Problems to Solve

Student Task Statement

1. Choose a problem to solve.

Problem A:

Jada is baking protein bars for a hike. She adds $\frac{1}{2}$ cup of walnuts and then decides to add another $\frac{1}{3}$ cup. How many cups of walnuts has she added altogether?

If the recipe requires $1\frac{1}{3}$ cups of walnuts, how many more cups of walnuts does Jada need to add? Explain or show your reasoning.

Problem B:

Kiran and Jada hiked $1\frac{1}{2}$ miles and took a rest. Then they hiked another $\frac{4}{10}$ mile before stopping for lunch. How many miles have they hiked so far?

If the trail they are hiking is a total of $2\frac{1}{2}$ miles, how much farther do they have to hike? Explain or show your reasoning.

- 2. Discuss the problems and solutions with your partner. What is the same about your strategies and solutions? What is different?
- 3. Revise your work if necessary.