Unit 6, Lesson 12

Solve Problems

Let's solve more problems by adding and subtracting fractions with unlike denominators.

Warm-up

Estimation Exploration: Large Denominators

What is the value of the sum?

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

Record an estimate that is:

too low	about right	too high

Activity 1

Priya's Salad Dressing

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. Do you agree? Explain or show your reasoning.

3. Priya says her recipe makes about $1\frac{1}{2}$ cups of dressing. Do you agree? Explain or show your reasoning.

Activity 2

More Problems to Solve

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?

   The recipe requires $1\frac{1}{3}$ cups of walnuts. How many more cups of walnuts does Jada 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?

   The trail is a total of $2\frac{1}{2}$ miles. How much farther do they hike? Explain or show your reasoning.

2. Discuss the problems and solutions with your partner. How are your strategies alike? How are they different?

3. Revise your work if necessary.