

# 1.4 Visiting the Spice Shop

## Adding and Subtracting Mixed Numbers

All over the world, cooks use spices to add flavor to foods. Because recipe ingredients are often measured using fractions, cooking can involve operating with fractional quantities.

Reyna owns a spice shop in Tupelo Township. Some of her recipes are shown below.



- Which makes a greater amount of spice mix, Betty's Cake Spices recipe, or the Garam Masala recipe? How much more spice mix?

## Problem 1.4

- A**
1. Latisha buys spices to make one batch of Spice Parisienne. Use estimation to decide whether she buys more or less than 4 ounces of spices. Explain your reasoning.
  2. Use estimation to decide which weighs more, one batch of Betty's Cake Spices or one batch of Garam Masala. About how much more does it weigh? Explain.

For Questions B and C,

- Decide which operation you will use to solve each problem.
- Find an approximate answer using estimation.
- Write a number sentence and answer the question.

- B** Betty buys spices for her famous cake.
1. How many ounces of spice does Betty buy?
  2. Tevin is allergic to cinnamon. If Betty removes cinnamon from the recipe for him, how many ounces of spice does she buy?
- C** Ms. Garza buys spices to make one batch of Garam Masala. When she weighs her spices at home, she only has  $10\frac{1}{12}$  ounces of spice. Which spice did Ms. Garza forget?
- D** Renuka has two pounds of pepper in her cupboard. She knows that there are 16 ounces in one pound. After Renuka makes one batch of Garam Masala, how many ounces of pepper does Renuka have left in her cupboard?
- E** For each number sentence below, write a spice story. Then find the value for  $N$  that makes the sentence true.
1.  $3\frac{1}{6} - 1\frac{3}{4} = N$
  2.  $N + \frac{3}{4} = 1\frac{1}{2}$
  3.  $2\frac{2}{3} - N = 1\frac{1}{4}$
- F**
1. Describe a strategy for estimating sums and differences of fractions, including mixed numbers.
  2. An **algorithm** (AL guh rith um) is a plan, or a series of steps, for doing a computation. Each step in an algorithm should be clear and precise. Describe an algorithm for finding sums and differences of fractions, including mixed numbers.

**ACE** Homework starts on page 18.