Date

LESSONPractice C1.5For use with pages 28 - 33

1. Stamp Collection Your stamp collection consists of 145 stamps. Each stamp has either a cancellation mark or no cancellation mark. There are 93 more stamps with cancellation marks than stamps without cancellation marks. Let *x* be the number of stamps with cancellation marks. Which equation correctly models this situation?

A. x + 93 = 145 **B.** x + (x + 93) = 145**C.** x + (x - 93) = 145

In Exercises 2 and 3, write an equation that you can use to solve the problem. You do *not* need to solve the problem.

- **2.** Your soccer team has raised \$400 for cleats and shin guards. It will cost \$41.50 for each of the 15 players to have a pair of cleats and shin guards. How much more money will each player have to pay to cover the cost?
- **3.** You are putting tile on part of the walls in your kitchen. You are using a combination of plain and decorative tiles. You need to use a total of 500 tiles and you want to use three times as many plain tiles as decorative tiles. How many of each kind of tile will you need?

In Exercises 4 and 5, write the formula that is needed to solve the problem and identify the values of the variables that are given. You do *not* need to solve the problem.

- **4.** You are traveling 250 miles to your friend's house. It takes you 5 hours to get there. What was your average speed?
- **5.** The savings account in which you initially invested \$250 has earned \$30 simple interest in 5 years. What is the interest rate of the account?
- **6. Party** You are responsible for buying the frozen lasagna for an upcoming birthday party. Each package of lasagna costs \$7.99 and serves 8. You need to buy enough packages so that each person can have two servings. There will be 17 people at the picnic. How many packages do you need? What is the total cost for the lasagna?
- **7. Temperature** Last year, the low temperature in your town was 32°F. The high temperature for the year was 3 times this temperature. What were last year's high and low temperatures in degrees Celsius? Round your answers to the nearest tenth of a degree.
- **8. Painting** You and your friend are painting a 150-foot long fence. You start at opposite ends at the same time and paint towards each other. You paint the fence at a rate of 1.75 feet per minute and your friend paints at a rate of 1.25 feet per minute.
 - **a.** How long will it take you to complete the fence?
 - **b.** How far from your beginning point will each of you be?