In Exercises 1-3, identify what you know and what you need to find out. You do *not* need to solve the problem.

- **1.** In science class, you are comparing the growths of plants subject to different conditions. Plant A has grown 25 inches in the same amount of time plant B has grown 17.5 inches. How many times taller is plant A than plant B?
- **2.** Your class is making a mosaic mural out of 1-inch by 1-inch colored tiles. You will make a rectangular mural that is 8 feet long and 4 feet tall. How many tiles will you need to make the mural?
- **3.** Your baseball team has raised \$240 for T-shirts and hats. It will cost \$15 for each of the 20 players to have a T-shirt and a hat. How much more money will each player have to pay to cover the cost?

In Exercises 4 and 5, state the formula that is needed to solve the problem. You do *not* need to solve the problem.

- **4.** The temperature is 74°C. What is the temperature in degrees Fahrenheit?
- **5.** You are traveling 150 miles to your cousin's house. You travel at a rate of 50 miles per hour. When will you get to your cousin's house?
- **6. Stamp Collection** Your stamp collection consists of 120 stamps. Each stamp has either a cancellation mark or no cancellation mark. There are 75 more stamps with cancellation marks than stamps without cancellation marks. Let *x* be the number of stamps without cancellation marks. Which equation correctly models this situation?

A.
$$x + 75 = 120$$

B.
$$x + (x + 75) = 120$$

C.
$$x + (x - 75) = 120$$

- **7. Picnic** You are responsible for buying the hamburger rolls for an upcoming picnic. Each bag of rolls costs \$1.30 and contains 8 rolls. You need to buy a total of 64 rolls. How much money will it cost for the rolls?
- **8. Temperature** Yesterday's high and low temperatures were 50°F and 41°F, respectively. What are these temperatures in degrees Celsius?
- **9. Sandbox** A civic group is building a sandbox that is enclosed by 1-foot wide railroad ties. The group needs to find the area inside the sandbox to find the amount of sand needed. Use the figure and the formula for area to write an equation that you can use to find the area inside the sandbox.

