

7-5 Study Guide and Intervention (continued)

Using Percent Equations

Solve Problems The percent equation can be used to solve real-world problems.

Example REAL ESTATE A commission is the fee paid to the real estate agent based on a percent of sales. If a real estate agent's commission is 3% and the house sold for \$150,000, how much was the real estate agent's commission?

The whole is \$150,000. The percent is 3%. You need to find the amount of the commission, or the part. Let c represent the amount of the commission.

$$\text{part} = \text{percent} \cdot \text{whole}$$

$$c = 0.03 \cdot 150,000 \quad \text{Write the percent equation, writing 3\% as a decimal.}$$

$$c = 4500 \quad \text{Multiply.}$$

So, the real estate agent made \$4500 in commission.

Exercises

- 1. RUNNING** Emily is in training for a marathon. She ran 4 miles every day this week. She wants to increase her distance every week by 25%. How many miles a day will she run next week?
- 2. TESTS** Juan got 15 questions correct on his pretest. He wants to get 20% more correct on his post test. How many questions does he want to get correct on his post test?
- 3. CALORIES** The average person should eat around 2000 Calories a day. If Susan ate 1500 Calories, what percent of the average person's total did she eat?
- 4. COMPUTERS** Chan bought a \$600 computer, but his total was \$648. What percent sales tax did he pay?
- 5. JEANS** Jodi found a pair of jeans on sale for \$90. Her friend told her that was only 75% of the original price. What was the original price of the jeans?