



Vocabulary and Concept Check

- 1. **VOCABULARY** Write the percent equation in words.
- **2. REASONING** A number *n* is 150% of number *m*. Is *n* greater than, less than, or equal to *m*? Explain your reasoning.
- 3. DIFFERENT WORDS, SAME QUESTION Which is different? Find "both" answers.

What number is 20% of 55?

55 is 20% of what number?

20% of 55 is what number?

0.2 • 55 is what number?



Practice and Problem Solving

Answer the question. Explain the method you chose.

- **4.** What number is 24% of 80?
- **6.** 15 is 30% of what number?
- 8. 20 is what percent of 52?

- 5. 15 is what percent of 40?
- **7.** What number is 120% of 70?
- **9.** 48 is 75% of what number?

Write and solve an equation to answer the question.

- **10.** 20% of 150 is what number?
- **12.** 35% of what number is 35?
 - **14.** 29 is what percent of 20?
 - **16.** What percent of 300 is 51?

- **11.** 45 is what percent of 60?
- **13.** 0.8% of 150 is what number?
- **15.** 0.5% of what number is 12?
- **17.** 120% of what number is 102?

ERROR ANALYSIS Describe and correct the error in using the percent equation.

- **18.** What number is 35% of 20?
 - $a = p \cdot w$ $= 35 \cdot 20$ = 700

19. 30 is 60% of what number?

$$a = p \cdot w$$

$$= 0.6 \cdot 30$$

$$= 18$$

- **20. COMMISSION** A salesperson receives a 2.5% commission on sales. What commission does the salesperson receive for \$8000 in sales?
- **21. FUNDRAISING** Your school raised 125% of its fundraising goal. The school raised \$6750. What was the goal?
- **22. SURFBOARD** The sales tax on a surfboard is \$12. What is the percent of sales tax?

