3.1 Practice A

Identify the terms, coefficients, and constants in the expression.

1.
$$3 + c + e$$

2.
$$5m + 9$$

3.
$$3p^2 + 7$$

Evaluate the expression when c = 4, d = 6, and e = 10.

5.
$$c + d$$

6.
$$15 - d$$

8.
$$\frac{24}{c}$$

9.
$$9 + e$$

10.
$$16 \div c$$

12.
$$\frac{60}{d}$$

Evaluate the expression when m = 5 and n = 8.

13.
$$4m - 7$$

14.
$$4n - 3m$$

15.
$$\frac{6m}{n-3}$$

16. Describe and correct the error in evaluating the expression when m = 10.

$$\begin{array}{c} 3m - 6 = 3 \bullet 10 - 6 \\ = 3 \bullet 4 \\ = 12 \end{array}$$

- 17. Twenty-five students go to lunch. Pizza costs \$3 and sandwiches cost \$2. Twelve students buy pizza. What is the total amount of money spent on sandwiches?
- **18.** Each student in your class must do 14 homework problems. There are 23 students in the class. How many problems will your teacher have to grade?
- 19. A summer job pays \$5 per hour.
 - a. You work for 12 hours. How much do you make?
 - b. After working 24 hours, do you have enough money to buy an MP3 player that costs \$100?
- 20. You can read 52 pages per hour.
 - a. You read for an hour and a half. How many pages have you read?
 - b. You must read 130 pages for homework. Can you complete the assignment in two hours? Explain your reasoning.

3.2

Practice A

Write the phrase as an expression.

- 1. 6 more than 4
- 3. 3 times a number x
- 5. the product of 8 and a number p
- 7. a number y decreased by 10
- 9. the total of a number c and 3
- 11. Describe and correct the error in writing the phrase as an expression.

- 2. 7 less than 15
- 4. the quotient of a number m and 4
- **6.** twice a number x
- 8. 7 fewer than a number k
- 10. the difference of 11 and a number d

Write two phrases for the expression.

- 12. x + 8
- 13. 20 n

Write the phrase as an expression. Then evaluate when x = 2 and y = 10.

- **14.** twelve more than the product of 5 and a number x
- **15.** the quotient of a number x and the sum of 3 and 7
- **16.** 17 less than the quotient of 200 and a number y
- 17. 15 decreased by the product of a number x and 4
- **18.** You eat five slices of bread. Your friend eats two slices fewer than you eat. Write an expression that describes the number of slices your friend eats.
- 19. Your uncle is 2 years older than 3 times your age.
 - **a.** You are x years old. Write an expression to describe your uncle's age.
 - b. You are 12 years old. How old is your uncle?