## LESSON

## **Evaluating Expressions**

## Practice and Problem Solving: A/B

Evaluate each expression for the given value(s) of the variable(s).

1. 
$$a - 4$$
 when  $a = 16$ 

2. 
$$2b + 9$$
 when  $b = 3$ 

3. 
$$c \div 2$$
 when  $c = 26$ 

4. 
$$5(9 + d) - 6$$
 when  $d = 3$ 

5. 
$$g^2 + 23$$
 when  $g = 6$ 

6. 
$$3h - j$$
 when  $h = 8$  and  $j = 11$ 

7. 
$$(n-2) \bullet m$$
 when  $n = 5$  and  $m = 9$ 

8. 
$$r(s^2)(t)$$
 when  $r = 2$ ,  $s = 3$ , and  $t = 5$ 

Use the given values to complete each table.

p	2(13 - p)
2	
3	
4	

V	w	3 <i>v</i> + <i>w</i>
4	2	
6	3	
8	4	

x	у	$x^2 \div y$
2	1	
6	2	
8	4	

## Solve.

- 12. The sales tax in one town is 8%. So, the total cost of an item can be written as c + 0.08c. What is the total cost of an item that sells for \$12?
- 13. To change knots per hour to miles per hour, use the expression 1.15k, where *k* is the speed in knots per hour. A plane is flying at 300 knots per hour. How fast is that plane flying in miles per hour?
- 14. Lurinda ordered some boxes of greeting cards online. The cost of the cards is \$6.50n + \$3 where n is the number of boxes ordered and \$3 is the shipping and handling charge. How much will Lurinda pay if she orders 8 boxes of cards?