

Name \_\_\_\_\_

## Evaluate Algebraic Expressions and Formulas



**COMMON CORE STANDARD—6.EE.2c**  
Apply and extend previous understandings of arithmetic to algebraic expressions.

Evaluate the expression for the given values of the variables.

1.  $w + 6$  for  $w = 11$

2.  $r - 9$  for  $r = 20$

3.  $17 - 2c$  for  $c = 7$

**11 + 6**  
**17**

4.  $b^2 - 4$  for  $b = 5$

5.  $(h - 3)^2$  for  $h = 5$

6.  $x + x^2$  for  $x = 6$

7.  $m + 2m + 3$  for  $m = 12$

8.  $9a - 5a$  for  $a = 7$

9.  $4 \times (21 - 3h)$  for  $h = 5$

10.  $7m - 9n$  for  $m = 7$  and  $n = 5$

11.  $d^2 - 9k + 3$  for  $d = 10$  and  $k = 9$

12.  $3x + 4y \div 2$  for  $x = 7$  and  $y = 10$

### Problem Solving



13. The formula  $P = 2\ell + 2w$  gives the perimeter  $P$  of a rectangular room with length  $\ell$  and width  $w$ . A rectangular living room is 26 feet long and 21 feet wide. What is the perimeter of the room?

14. The formula  $c = 5(f - 32) \div 9$  gives the Celsius temperature in  $c$  degrees for a Fahrenheit temperature of  $f$  degrees. What is the Celsius temperature for a Fahrenheit temperature of 122 degrees?