

Name _____

Evaluate Algebraic Expressions and Formulas

Common
Core

COMMON CORE STANDARD—6.EE.A.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 $w = 11$

$11 + 6$

17

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

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

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

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

6. $4 \times (21 - 3h)$ for $h = 5$

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

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

9. $3x + 4y \div 2$ for $x = 7$ and
 $y = 10$

Problem Solving

Real
World

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

11. 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?

12. **WRITE** *Math* Explain how the terms *variable*, *algebraic expression*, and *evaluate* are related.
