

Ch. 5 Review (Expressions)

1. What is the value of the expression $f^2 + 5$ if $f = 3$?

$$(3)^2 + 5 = 14$$

2. What is the value of $9x - 4y$ if $x = 3$ and $y = 2$?

$$9(3) - 4(2) = 27 - 8 = 19$$

3. Which property of multiplication is shown by the equation $14 \cdot y \cdot 1 = 14y$?

A. Associative

B. Multiplicative Property of Zero

C. Commutative

D. Multiplicative Identity

4. What are the next three terms in the sequence 3, 6, 9, 12, ...?

$$15, 18, 21$$

5. What are the next three terms in the sequence 2.0, 3.5, 5.0, 6.5, ...?

$$8.0, 9.5, 11.0$$

6. What is the next term in the pattern 0.4, 0.8, 1.2, 1.6, ...?

$$2.0$$

7. What is the value of the expression $3(2 - 7)$?

$$3(2 - 7) = 3(2) - 3(7) = 6 - 21 = -15$$

8. Use the distributive property to simplify the following: $-3(x + 10)$

$$-3x + (-3)(10) = -3x - 30$$

9. Simplify $7y + 15 - 7y - 8$.

$$7$$

10. Simplify $x + 6 - 3x - 8$.

$$-2x - 2$$

11. Add $(12x + 5) + (3x - 7)$.

$$15x - 2$$

12. Subtract $(3x + 5) - (x + 2)$.

$$2x + 3$$

13. In the expression $10a + 4$, identify the coefficient.

10

14. Use the Distributive Property to write $-4(7 - 1)$ as an equivalent expression. What is the value of the expression?

$$-4(7) - (-4)(1) = -28 + 4 = -24$$

15. Add $(-2x + 4) + (4x + 6)$.

$$2x + 10$$

16. Subtract $(-x - 3) - (5x + 2)$.

$$-6x - 5$$

17. Simplify $-2(x + 5)$.

$$-2x - 10$$

18. What is the value of $11 + 3(9 - 6) - 4$?

$$11 + 3(9) - 3(6) - 4 = 11 + 27 - 18 - 4 = 16$$

19. Simplify $2x + 1 - x + 2$.

$$x + 3$$

20. What is the value of $6a + 2b$ if $a = 1$ and $b = 2$?

$$6(1) + 2(2) = 10$$

21. What is the value of $12d - 7c$ if $d = 2$ and $c = 3$?

$$12(2) - 7(3) = 24 - 21 = 3$$

22. Evaluate $\frac{4r}{s}$ if $r = 9$ and $s = 2$.

$$\frac{4(9)}{2} = \frac{36}{2} = 18$$

23. Name the multiplication property shown the equation $12 \cdot m = m \cdot 12$.

A. Associative

B. Multiplicative Property of Zero

C. Commutative

D. Multiplicative Identity