

Practice 2-3 Simplifying Variable Expressions**Simplify each expression.**

1. $16 + 7y - 8$

2. $18m - 7 + 12m$

3. $5(3t) - 7(2t)$

4. $2x - 9y + 7x + 20y$

5. $3(9k - 4) - 4(5n - 3)$

6. $6(g - h) - 6(g - h)$

7. $-21(a + 2b) + 14a - 9b$

8. $-7a + 3(a - c) + 5c$

9. $-2(-5)q + (-72)(-q)$

Name the coefficients, any like terms, and any constants.

Coefficients

Like Terms

Constants

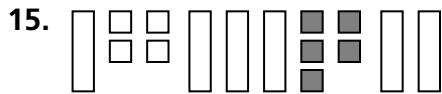
10. $3x + 7$

11. $4m + (-3n) + n$

12. $6kp + 9k + kp - 14$

13. $-8y + 6ab + 7 - 3ba$

14. $c + 2c + c - 5c + 1$

Write an expression for each model. Simplify the expression.



Justify each step.

17. $5(n + 4) + 9n = (5n + 20) + 9n$

= $5n + (20 + 9n)$ _____

= $5n + (9n + 20)$ _____

= $(5n + 9n) + 20$ _____

= $(5 + 9)n + 20$ _____

= $14n + 20$ _____