

LESSON
2.5
Practice A
For use with pages 96–101

Decide whether the statement is true or false. If it is false, rewrite the right-hand side of the equation so that the statement is true.

1. $9(1 + 4) \stackrel{?}{=} 9(1) + 4$ 2. $(10 + 3)6 \stackrel{?}{=} 10(6) + 10(3)$
 3. $15(8 - 3) \stackrel{?}{=} 15(8) - 15(3)$ 4. $(18 - 5)(2) \stackrel{?}{=} 18 - 5(2)$

Use the distributive property to write an equivalent expression.

5. $3(x + 5)$ 6. $(x + 2)6$ 7. $-2(x + 9)$
 8. $(x + 10)(-1)$ 9. $4(x - 6)$ 10. $-3(x - 1)$

Identify the terms, like terms, coefficients, and constant terms of the expression.

11. $2x + 5 + x + 1$ 12. $18 + 2y - 1 + 3y$ 13. $8x + 4 - 3x + 7$
 14. $21 - 8x - 4 + 9x$ 15. $2x^2 - 3 + 5x^2 + 10$ 16. $-3x^2 + 1 + 8x^2 - 5$

Simplify the expression.

17. $8x + (-12x)$ 18. $17x + (-9x)$ 19. $15x - x$
 20. $3 + 6x + 1$ 21. $8x + 5 + 2x$ 22. $2(x + 4) + 7x$

- 23. Necklaces** You are making necklaces using two different colors of stone beads. Stone A costs \$.07 per bead and stone B costs \$.05 per bead. You need 50 beads to complete a necklace. The equation $c = 0.07n + 0.05(50 - n)$ gives the total cost c as a function of the number n of stone A beads used. Find the total cost if you use 35 stone A beads.
- 24. Hiking Socks** A local sports store is selling its hiking socks for \$2 off the regular price of a pair of socks. You buy 3 pairs of hiking socks. Write an equation that gives the total cost t as a function of the regular cost r of a pair of socks. Then find the total cost if the socks regularly cost \$10 per pair.
- 25. Catalog Mailing List** Two data entry personnel enter addresses for a catalog's mailing list. Person 1 can enter 4 addresses in one minute. Person 2 can enter 2 addresses in one minute. Use the verbal model below to write an equation that you can use to find out how long it will take the personnel to enter 500 addresses. Let a be the number of addresses entered by person 1.

