

LESSON
2.5**Practice C**

For use with pages 96–101

Use the distributive property to write an equivalent expression.

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| 1. $5x(x + 3)$ | 2. $2x(x - 8)$ | 3. $-4x(x + 6)$ |
| 4. $(10x - 1)(-7x)$ | 5. $\frac{1}{2}(8x - 1)$ | 6. $\frac{2}{3}(3x + 9)$ |
| 7. $-\frac{1}{4}(16 - 4x)$ | 8. $\frac{3}{4}x(8x + 2)$ | 9. $\frac{2}{5}x(x^2 - 1)$ |

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

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|---------------------------|-------------------------|--------------------------------|
| 10. $-2x^2 + 3x + 5x - 1$ | 11. $5xy - 3 + 7xy - 4$ | 12. $6x^2 - 3x + 1 - 5x^2 + 2$ |
|---------------------------|-------------------------|--------------------------------|

Simplify the expression.

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|--------------------------|--------------------------|------------------------|
| 13. $3(5x - 1) + 7$ | 14. $3x + 5(x - 4)$ | 15. $7(x - 3) - 2x$ |
| 16. $10x - 3(2x + 8)$ | 17. $18 - 7(3 - x)$ | 18. $14x - 5(3 - 2x)$ |
| 19. $(4x - 1)(-2) + 15x$ | 20. $(6 - 5x)(-3) - 12x$ | 21. $20 - (8 - x)(-3)$ |

Translate the verbal phrase into an expression. Then simplify the expression.

22. Twice the difference of 5 and x , increased by the product of 2 and x
23. The product of -5 and the sum of x and 8, decreased by the product of 3 and x
24. **Quilts** You are using solid colored fabric that costs \$.06 per square and patterned fabric that costs \$.10 per square to make a quilt. You need 660 squares to complete the quilt. Write an equation that gives the total cost c as a function of the number n of solid squares used. Then find the total cost if you use 200 solid colored squares.
25. **Tennis Balls** A local sports store is selling packs of 8 tennis balls for 25% off the regular price. You buy 3 packs of tennis balls. Write an equation that gives the total cost t as a function of the regular cost r of a pack of tennis balls. Then find the total cost if a pack of tennis balls regularly costs \$20.
26. **Making Copies** You have to copy a 500-page document. There are 2 copiers in the office: copier A makes 13 copies in 1 minute and copier B makes 18 copies in 1 minute. Let a be the number of pages you put in copier A. Round your answer to the nearest tenth.
- Write an equation you can use to find out how long it will take to make the copy.
 - How long will it take you to make the copy if you put 200 pages in copier A? Round your answer to the nearest tenth.
 - Which will be faster, the faster copier, or using both copiers by putting 250 pages in each?