

LESSON
2.5
Practice B
For use with pages 96–101
Use the distributive property to write an equivalent expression.

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| 1. $5(x + 11)$ | 2. $3(x - 12)$ | 3. $-4(x + 8)$ |
| 4. $9(2x + 1)$ | 5. $(x - 7)(-10)$ | 6. $(4x + 3)5$ |
| 7. $x(4x - 1)$ | 8. $2x(x - 1)$ | 9. $-x(5x + 2)$ |

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

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|----------------------------|---------------------------|
| 10. $-8 + 2x + 5 + 11x$ | 11. $4x^2 + 1 - 3x^2 + 5$ |
| 12. $7y^2 - 6 + 3y^2 - 15$ | 13. $3xy + 5 - 2xy + 10$ |

Simplify the expression.

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|---------------------|----------------------|----------------------|
| 14. $6 + 10x + 3$ | 15. $2(3x + 1) + 4x$ | 16. $6(5 - x) + 12x$ |
| 17. $7(x - 1) - 5$ | 18. $8x + 3(2x - 1)$ | 19. $-2(x + 4) - 3$ |
| 20. $11x - (x + 7)$ | 21. $9 - 2(x - 4)$ | 22. $7x - 3(4 - 2x)$ |

23. Curtains You are making curtains by alternating strips of solid colored fabric and patterned fabric. The solid colored fabric costs \$.99 per strip and the patterned fabric costs \$1.25 per strip. You need 7 strips for one curtain. Write an equation that gives the total cost c as a function of the number n of solid colored strips used. Then find the total cost if you use 3 solid colored strips.

24. Shoe Boxes A department store is selling its plastic shoe boxes for \$1.50 off the regular price of a shoe box. You buy 4 shoe boxes. Write an equation that gives the total cost t as a function of the regular cost r of a shoe box. Then find the total cost if the boxes regularly cost \$3.59 each.

25. Delivering Papers You and your friend share a paper route. You can deliver 4 papers in one minute and your friend can deliver 3 papers in one minute. Seventy-five papers have to be delivered each day on the route. Let n be the number of papers you deliver.

- a. Use the verbal model to write an equation that you can use to find out how long it will take the both of you together to deliver the papers.

Total amount of time (min)	=	Your rate (min/paper)	·	Number of papers you deliver (papers)	+	Friend's rate (min/papers)	·	Number of papers friend delivers (papers)
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- b. How long will it take the both of you to deliver the papers if you deliver 38 papers? 50 papers?