

LESSON
4.4**Practice B**

For use with pages 259–265

Factor the expression. If the expression cannot be factored, say so.

- | | | |
|-----------------------|-----------------------|------------------------|
| 1. $3x^2 + 10x - 8$ | 2. $2x^2 + 5x - 3$ | 3. $4x^2 + 4x + 1$ |
| 4. $2x^2 - 5x + 1$ | 5. $4x^2 + 5x - 6$ | 6. $2x^2 + 11x + 15$ |
| 7. $9x^2 + 12x + 4$ | 8. $12x^2 - 24x + 9$ | 9. $18x^2 - 2$ |
| 10. $12x^2 + 17x + 6$ | 11. $15x^2 + 8x - 16$ | 12. $4x^2 - 5$ |
| 13. $12x^2 - 39x + 9$ | 14. $18x^2 - 9x - 14$ | 15. $20x^2 - 54x + 36$ |
| 16. $42x^2 + 35x + 7$ | 17. $-12x^2 - x + 11$ | 18. $80x^2 + 68x + 12$ |

Solve the equation.

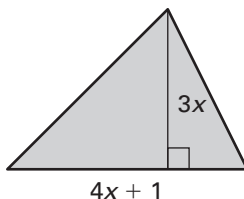
- | | |
|----------------------------------|--|
| 19. $2x^2 + 3x - 2 = 0$ | 20. $2x^2 - 3x - 9 = 0$ |
| 21. $4x^2 - 8x + 3 = 0$ | 22. $9x^2 - 4 = 0$ |
| 23. $8x^2 - 6x + 1 = 0$ | 24. $18x^2 + 48x = -32$ |
| 25. $9x^2 + 11x + 18 = -10x + 8$ | 26. $5x^2 - 2x - 6 = -3x^2 + 6x$ |
| 27. $5x^2 - 3x + 3 = -2x^2 + 3$ | 28. $25x^2 - 24x - 9 = -7x^2 + 12x - 18$ |

Find the zeros of the function by rewriting the function in intercept form.

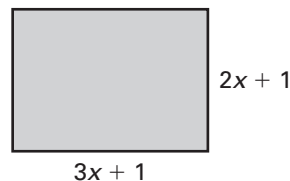
- | | |
|------------------------------|----------------------------|
| 29. $y = 3x^2 + 2x$ | 30. $y = 12x^2 + 8x - 15$ |
| 31. $f(x) = 5x^2 - 25x + 30$ | 32. $y = 25x^2 + 10x - 24$ |
| 33. $g(x) = 33x^2 - 9x - 24$ | 34. $y = 4x^2 + 1$ |

Find the value of x .

35. Area of the triangle = 27



36. Area of the rectangle = 22



37. **Picture Frame** You are making a frame of uniform width for a picture that is to be displayed at the local museum. The picture is 3.25 feet tall and 3 feet wide. The museum has allocated 15 square feet of wall space to display the picture. What should the width of the frame be in order to use all of the allocated space?

