
Name _____

Date _____

LESSON
4.3

Practice

For use with pages 252–258

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

1. $x^2 + 4x - 21$

2. $x^2 - 6x + 5$

3. $x^2 + 6x + 8$

4. $x^2 - x - 6$

5. $x^2 - x - 12$

6. $x^2 - 2x - 8$

7. $x^2 - 9x + 20$

8. $x^2 + 3x - 18$

9. $x^2 - 9$

10. $x^2 + 8x + 16$

11. $x^2 - 11x + 28$

12. $x^2 - 2x + 2$

13. $x^2 + 4x - 32$

14. $x^2 - 3x - 10$

15. $x^2 - 25$

16. $x^2 - 9x + 14$

17. $x^2 - 100$

18. $x^2 - 8x - 15$

Solve the equation.

19. $x^2 + x - 6 = 0$

20. $x^2 + 3x - 10 = 0$

21. $x^2 - 5x + 6 = 0$

22. $x^2 - 4x + 4 = 0$

23. $x^2 + 7x + 12 = 0$

24. $x^2 - 3x - 28 = 0$

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LESSON
4.3**Practice** *continued*
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25. $x^2 - 36 = 0$

26. $x^2 - 2x - 15 = 0$

27. $x^2 - 11x + 18 = 0$

28. $3x^2 = 48$

29. $x^2 - 7x - 4 = -10$

30. $9x - 8 = x^2$

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

31. $y = x^2 + 8x + 15$

32. $y = x^2 - 12x + 32$

33. $f(x) = x^2 - 2x - 35$

34. $y = x^2 - x - 30$

35. $g(x) = x^2 + 10x + 9$

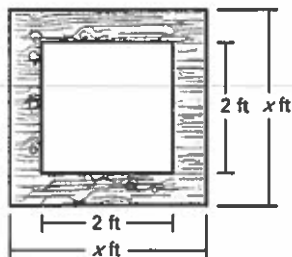
36. $y = x^2 - 6x$

37. $h(x) = x^2 - 12x + 27$

38. $y = x^2 - 9$

39. $y = x^2 + 16x + 64$

40. **Picture Frame** You are making a square frame of uniform width for a square picture that has side lengths of 2 feet. The total area of the frame is 5 square feet. What is the length of the sides of the frame?



41. **Concert Stage** The dimensions of the old stage at the concert hall were 30 feet wide and 15 feet deep. The new stage has a total area of 1000 square feet. The dimensions of the new stage were created by adding the same distance x to the width and the depth of the old stage dimensions. What is the value of x ?