GUIDED PRACTICE

SEE EXAMPLE 1
p. 560

Factor each trinomial by guess and check.

1. $x^2 + 13x + 36$ **2.** $x^2 + 11x + 24$ **3.** $x^2 + 14x + 40$

SEE EXAMPLE 2
p. 561

Factor each trinomial. Check your answer.

4. $x^2 + 4x + 3$ **5.** $x^2 + 10x + 16$ **6.** $x^2 + 15x + 44$

7. $x^2 - 7x + 6$ **8.** $x^2 - 9x + 14$ **9.** $x^2 - 11x + 24$

SEE EXAMPLE 3
p. 562

10. $x^2 - 6x - 7$ **11.** $x^2 + 6x - 27$ **12.** $x^2 + x - 30$

13. $x^2 - x - 2$ **14.** $x^2 - 3x - 18$ **15.** $x^2 - 4x - 45$

SEE EXAMPLE 4
p. 563

16. Factor $n^2 + 6n - 7$. Show that the original polynomial and the factored form have the same value for $n = 0, 1, 2, 3,$ and 4.

PRACTICE AND PROBLEM SOLVING

Independent Practice

For Exercises	See Example
17–19	1
20–25	2
26–31	3
32	4

Extra Practice
Skills Practice p. S18
Application Practice p. S35

Factor each trinomial by guess and check.

17. $x^2 + 13x + 30$ **18.** $x^2 + 11x + 28$ **19.** $x^2 + 16x + 48$

Factor each trinomial. Check your answer.

20. $x^2 + 12x + 11$ **21.** $x^2 + 16x + 28$ **22.** $x^2 + 15x + 36$

23. $x^2 - 6x + 5$ **24.** $x^2 - 9x + 18$ **25.** $x^2 - 12x + 32$

26. $x^2 + x - 12$ **27.** $x^2 + 4x - 21$ **28.** $x^2 + 9x - 36$

29. $x^2 - 12x - 13$ **30.** $x^2 - 10x - 24$ **31.** $x^2 - 2x - 35$

32. Factor $n^2 - 12n - 45$. Show that the original polynomial and the factored form have the same value for $n = 0, 1, 2, 3,$ and 4.

Match each trinomial with its correct factorization.

33. $x^2 + 3x - 10$ **A.** $(x - 2)(x - 5)$

34. $x^2 - 7x + 10$ **B.** $(x + 1)(x + 10)$

35. $x^2 - 9x - 10$ **C.** $(x - 2)(x + 5)$

36. $x^2 + 11x + 10$ **D.** $(x + 1)(x - 10)$

37. Write About It Compare multiplying binomials with factoring polynomials into binomial factors.

Factor each trinomial. Check your answer.

38. $x^2 + x - 20$ **39.** $x^2 - 11x + 18$ **40.** $x^2 - 4x - 21$

41. $x^2 + 10x + 9$ **42.** $x^2 - 12x + 32$ **43.** $x^2 + 13x + 42$

44. $x^2 - 7x + 12$ **45.** $x^2 + 11x + 18$ **46.** $x^2 - 6x - 27$

47. $x^2 + 5x - 24$ **48.** $x^2 - 10x + 21$ **49.** $x^2 + 4x - 45$

50. Factor $n^2 + 11n + 28$. Show that the original polynomial and the factored form have the same value for $n = 0, 1, 2, 3,$ and 4.