

# Practice 10-4

## Mixed Exercises

Use tiles to factor each expression.

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|--------------------|--------------------|--------------------|
| 1. $2x^2 + 3x + 1$ | 2. $d^2 + 8d + 7$  | 3. $y^2 + 6y + 8$  |
| 4. $b^2 - 2b - 3$  | 5. $s^2 - 4s - 5$  | 6. $2a^2 + 5a + 3$ |
| 7. $2n^2 + n - 6$  | 8. $3x^2 - x - 4$  | 9. $a^2 + 3a + 2$  |
| 10. $p^2 - 8p + 7$ | 11. $d^2 + 6d + 5$ | 12. $n^2 + n - 6$  |

Factor each expression.

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|-----------------------|----------------------|-----------------------|
| 13. $x^2 + 5x - 14$   | 14. $b^2 + 9b + 14$  | 15. $2y^2 - 9y - 5$   |
| 16. $a^2 + 7a + 12$   | 17. $5x^2 - 2x - 7$  | 18. $7n^2 + 9n + 2$   |
| 19. $x^2 - 8x + 12$   | 20. $x^2 + 7x - 18$  | 21. $n^2 - 7n + 10$   |
| 22. $s^2 - 5s - 14$   | 23. $x^2 - 9x + 8$   | 24. $x^2 - 2x - 24$   |
| 25. $3c^2 - 17c - 6$  | 26. $3x^2 + 8x + 4$  | 27. $x^2 + 7x + 10$   |
| 28. $6x^2 - 7x - 10$  | 29. $m^2 - 4m - 21$  | 30. $3x^2 - 10x + 8$  |
| 31. $x^2 - 5x - 24$   | 32. $b^2 - 4b - 60$  | 33. $3a^2 - 16a - 12$ |
| 34. $m^2 + 7m + 10$   | 35. $n^2 - n - 72$   | 36. $k^2 - 6k + 5$    |
| 37. $5x^2 + 2x - 3$   | 38. $3a^2 + 7a + 2$  | 39. $3b^2 + 7b + 2$   |
| 40. $d^2 - 4d + 3$    | 41. $b^2 - 26b + 48$ | 42. $n^2 - 15n + 26$  |
| 43. $n^2 - n - 6$     | 44. $z^2 - 14z + 49$ | 45. $7r^2 - 10r + 3$  |
| 46. $3x^2 + 8x + 5$   | 47. $2b^2 + 9b + 4$  | 48. $t^2 - 6t - 27$   |
| 49. $b^2 + 4b - 12$   | 50. $d^2 + 11d + 18$ | 51. $5x^2 - 7x + 2$   |
| 52. $x^2 - 13x + 42$  | 53. $5x^2 - 22x + 8$ | 54. $4n^2 + 17n - 15$ |
| 55. $3a^2 - 5a - 2$   | 56. $h^2 + 7h - 18$  | 57. $x^2 + 3x - 10$   |
| 58. $p^2 - 12p - 28$  | 59. $y^2 + 6y - 55$  | 60. $b^2 + 3b - 4$    |
| 61. $5a^2 - 33a - 14$ | 62. $3b^2 - 2b - 8$  | 63. $3x^2 + 7x - 6$   |
| 64. $r^2 + 2r - 35$   | 65. $c^2 - 3c - 10$  | 66. $x^2 + 8x + 15$   |
| 67. $2x^2 + 13x - 24$ | 68. $n^2 - 23n + 60$ | 69. $c^2 + 3c - 10$   |
| 70. $4r^2 - 11r - 3$  | 71. $2m^2 + 9m + 7$  | 72. $5x^2 - 3x - 2$   |
| 73. $y^2 - 16y + 64$  | 74. $n^2 + 10n + 25$ | 75. $r^2 - 14r - 51$  |
| 76. $7a^2 + 19a + 10$ | 77. $x^2 - x - 42$   | 78. $n^2 - 2n - 63$   |
| 79. $a^2 + 7a + 6$    | 80. $7a^2 - 30a + 8$ | 81. $3m^2 + 17m + 10$ |
| 82. $n^2 + 16n - 36$  | 83. $n^2 - 4n - 21$  | 84. $y^2 + 16y - 17$  |