

Practice 9-7**Factoring Special Cases****Factor each expression.**

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|------------------------|------------------------|---------------------------|
| 1. $x^2 - 9$ | 2. $4m^2 - 1$ | 3. $a^2 + 2a + 1$ |
| 4. $4x^2 + 12x + 9$ | 5. $x^2 - 22x + 121$ | 6. $n^2 - 4$ |
| 7. $9x^2 - 4$ | 8. $16c^2 - 49$ | 9. $9x^2 - 30x + 25$ |
| 10. $4x^2 - 20x + 25$ | 11. $2a^2 - 18$ | 12. $x^2 - 24x + 144$ |
| 13. $3n^2 - 3$ | 14. $9h^2 + 60h + 100$ | 15. $9d^2 - 49$ |
| 16. $81a^2 - 400$ | 17. $r^2 - 36$ | 18. $3a^2 - 48$ |
| 19. $b^2 + 4b + 4$ | 20. $10x^2 - 90$ | 21. $25x^2 - 64$ |
| 22. $12w^2 - 27$ | 23. $g^3 - 25g$ | 24. $x^2 + 6x + 9$ |
| 25. $a^2 - 25$ | 26. $36s^2 - 225$ | 27. $4b^2 + 44b + 121$ |
| 28. $x^2 - 16x + 64$ | 29. $x^2 - 2x + 1$ | 30. $d^2 - 49$ |
| 31. $x^3 - 36x$ | 32. $9y^2 - 289$ | 33. $x^2 - 30x + 225$ |
| 34. $100a^2 - 9$ | 35. $2x^2 + 4x + 2$ | 36. $5n^3 - 20n$ |
| 37. $9n^2 + 12n + 4$ | 38. $d^2 - 169$ | 39. $4a^2 - 81$ |
| 40. $x^2 - 121$ | 41. $5x^2 + 40x + 80$ | 42. $16n^2 + 56n + 49$ |
| 43. $3n^2 - 30n + 75$ | 44. $a^2 + 26a + 169$ | 45. $25x^2 - 144$ |
| 46. $9d^2 - 64$ | 47. $n^2 - 28n + 196$ | 48. $49a^2 - 14a + 1$ |
| 49. $y^2 + 8y + 16$ | 50. $y^2 - 400$ | 51. $x^2 - 10x + 25$ |
| 52. $4x^2 - 60x + 225$ | 53. $3x^2 - 363$ | 54. $y^2 - 81$ |
| 55. $a^2 - 100$ | 56. $256a^2 - 1$ | 57. $n^2 + 34n + 289$ |
| 58. $2d^3 - 50d$ | 59. $y^2 + 22y + 121$ | 60. $144x^2 - 25$ |
| 61. $4x^2 - 169$ | 62. $x^2 - 12x + 36$ | 63. $64r^2 + 80r + 25$ |
| 64. $50m^3 - 32m$ | 65. $b^2 - 225$ | 66. $x^2 - 18x + 81$ |
| 67. $b^2 - 64$ | 68. $16x^2 - 72x + 81$ | 69. $b^2 - 256$ |
| 70. $x^2 + 24x + 144$ | 71. $225x^2 - 16$ | 72. $2x^3 + 40x^2 + 200x$ |
| 73. $4r^2 - 25$ | 74. $16x^2 + 8x + 1$ | 75. $b^2 - 14b + 49$ |
| 76. $x^2 + 30x + 225$ | 77. $m^2 - 28m + 196$ | 78. $9r^2 - 256$ |
| 79. $b^2 + 20b + 100$ | 80. $m^2 - 16$ | 81. $4x^2 - 32x + 64$ |
| 82. $x^2 - 196$ | 83. $8x^3 - 32x$ | 84. $25x^2 - 30x + 9$ |
| 85. $8m^2 - 16m + 8$ | 86. $9x^2 - 400$ | 87. $m^2 - 144$ |