

Practice 5-5

Quadratic Equations

Solve each equation by factoring, by taking square roots, or by graphing.
When necessary, round your answer to the nearest hundredth.

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|---------------------------------|-------------------------|---------------------------|
| 1. $x^2 - 18x - 40 = 0$ | 2. $16x^2 = 56x$ | 3. $5x^2 = 15x$ |
| 4. $x^2 - 6x - 7 = 0$ | 5. $x^2 - 49 = 0$ | 6. $x^2 + 2x + 1 = 0$ |
| 7. $x^2 - 1 = 0$ | 8. $x^2 - 3x - 4 = 0$ | 9. $x^2 + 9x^2 + 20 = 0$ |
| 10. $6x^2 + 9 = -55x$ | 11. $(x + 5)^2 = 36$ | 12. $2x^2 - 3x = 0$ |
| 13. $2x^2 + x - 10 = 0$ | 14. $-4x^2 + 3x = -1$ | 15. $5x^2 - 6x + 1 = 0$ |
| 16. $3x^2 + 1 = -4x$ | 17. $-2x^2 + 2 = -3x$ | 18. $6x^2 + 1 = 5x$ |
| 19. $-2x^2 - x + 1 = 0$ | 20. $3x^2 + 5x = 2$ | 21. $x^2 - 6x = -8$ |
| 22. $x^2 + 6 = -7x$ | 23. $6x^2 + 18x = 0$ | 24. $2x^2 + 5 = 11x$ |
| 25. $3x^2 - 7x + 2 = 0$ | 26. $2x^2 - 3x = -1$ | 27. $2x^2 - x = 6$ |
| 28. $x^2 - 144 = 0$ | 29. $4x^2 + 2 = 6x$ | 30. $5x^2 + 2 = -7x$ |
| 31. $7x^2 + 6x - 1 = 0$ | 32. $2x^2 - 6x = -4$ | 33. $11x^2 - 12x + 1 = 0$ |
| 34. $7x^2 + 1 = -8x$ | 35. $x^2 + 9 = -10x$ | 36. $(x - 2)^2 = 18$ |
| 37. $x^2 - 8x + 7 = 0$ | 38. $x^2 - 16 = 0$ | 39. $x^2 + 6x = -8$ |
| 40. $x^2 + 3 = 4x$ | 41. $2x^2 + 6 = -7x$ | 42. $6x^2 + 2 = 7x$ |
| 43. $(x + 7)^2 = \frac{49}{16}$ | 44. $9x^2 - 8x = 1$ | 45. $10x^2 + 7x + 1 = 0$ |
| 46. $4x^2 + 2 = -9x$ | 47. $3x^2 + 4 = 8x$ | 48. $4x^2 + 5 + 9x = 0$ |
| 49. $9x^2 + 10x = -1$ | 50. $2x^2 + 9x + 4 = 0$ | 51. $2x^2 + 6x = -4$ |
| 52. $11x^2 - 1 = -10x$ | 53. $4x^2 = 1$ | 54. $6x^2 = 12x$ |
| 55. $25x^2 - 9 = 0$ | 56. $2x^2 + 11x = 6$ | 57. $8x^2 - 6x + 1 = 0$ |
| 58. $x^2 + 11 = -12x$ | 59. $6x^2 + 2 = 13x$ | 60. $x^2 = 121$ |
| 61. $4x^2 - 11x = 3$ | 62. $8x^2 + 6x + 1 = 0$ | 63. $x^2 + 9x + 8 = 0$ |
| 64. $x^2 + 8x = -12$ | 65. $x^2 + 6x = 40$ | 66. $2x^2 = 8$ |
| 67. $x^2 = x + 6$ | 68. $x^2 + 2x - 6 = 0$ | 69. $x^2 - 12 = 0$ |
| 70. $3x^2 + 4x = 6$ | 71. $7x^2 - 105 = 0$ | 72. $16x^2 = 81$ |
| 73. $x^2 + 5x + 4 = 0$ | 74. $x^2 + 36 = -13x$ | 75. $x^2 + 6 = 5x$ |

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