

Solving Quadratic Equations (D)

Name: _____

Date: _____

Solve each equation for x.

1. $2x^2 + 9x - 18 = 0$

11. $-4x^2 + 33x - 8 = 0$

2. $4x^2 - 27x - 7 = 0$

12. $-4x^2 - 15x + 54 = 0$

3. $5x^2 + 48x + 27 = 0$

13. $5x^2 + 24x + 27 = 0$

4. $3x^2 - 5x + 2 = 0$

14. $-3x^2 + 26x - 16 = 0$

5. $-5x^2 + 27x - 28 = 0$

15. $-3x^2 + 10x - 3 = 0$

6. $x^2 - 13x + 36 = 0$

16. $3x^2 + 34x + 63 = 0$

7. $4x^2 - 31x + 42 = 0$

17. $5x^2 - 8x + 3 = 0$

8. $x^2 + 4x - 45 = 0$

18. $-5x^2 + 12x + 32 = 0$

9. $-2x^2 + 7x + 72 = 0$

19. $-x^2 + 8x - 12 = 0$

10. $5x^2 - 21x - 20 = 0$

20. $-3x^2 + 23x - 30 = 0$

Solving Quadratic Equations (D) Answers

Name: _____

Date: _____

Solve each equation for x.

1. $2x^2 + 9x - 18 = 0$
 $(x + 6)(2x - 3) = 0$
 $x = -6, 1\frac{1}{2}$

2. $4x^2 - 27x - 7 = 0$
 $(x - 7)(4x + 1) = 0$
 $x = 7, -\frac{1}{4}$

3. $5x^2 + 48x + 27 = 0$
 $(5x + 3)(x + 9) = 0$
 $x = -\frac{3}{5}, -9$

4. $3x^2 - 5x + 2 = 0$
 $(x - 1)(3x - 2) = 0$
 $x = 1, \frac{2}{3}$

5. $-5x^2 + 27x - 28 = 0$
 $-(5x - 7)(x - 4) = 0$
 $x = 1\frac{2}{5}, 4$

6. $x^2 - 13x + 36 = 0$
 $(x - 9)(x - 4) = 0$
 $x = 9, 4$

7. $4x^2 - 31x + 42 = 0$
 $(4x - 7)(x - 6) = 0$
 $x = 1\frac{3}{4}, 6$

8. $x^2 + 4x - 45 = 0$
 $(x + 9)(x - 5) = 0$
 $x = -9, 5$

9. $-2x^2 + 7x + 72 = 0$
 $-(x - 8)(2x + 9) = 0$
 $x = 8, -4\frac{1}{2}$

10. $5x^2 - 21x - 20 = 0$
 $(5x + 4)(x - 5) = 0$
 $x = -\frac{4}{5}, 5$

11. $-4x^2 + 33x - 8 = 0$
 $-(x - 8)(4x - 1) = 0$
 $x = 8, \frac{1}{4}$

12. $-4x^2 - 15x + 54 = 0$
 $-(x + 6)(4x - 9) = 0$
 $x = -6, 2\frac{1}{4}$

13. $5x^2 + 24x + 27 = 0$
 $(x + 3)(5x + 9) = 0$
 $x = -3, -1\frac{4}{5}$

14. $-3x^2 + 26x - 16 = 0$
 $-(3x - 2)(x - 8) = 0$
 $x = \frac{2}{3}, 8$

15. $-3x^2 + 10x - 3 = 0$
 $-(3x - 1)(x - 3) = 0$
 $x = \frac{1}{3}, 3$

16. $3x^2 + 34x + 63 = 0$
 $(x + 9)(3x + 7) = 0$
 $x = -9, -2\frac{1}{3}$

17. $5x^2 - 8x + 3 = 0$
 $(x - 1)(5x - 3) = 0$
 $x = 1, \frac{3}{5}$

18. $-5x^2 + 12x + 32 = 0$
 $-(x - 4)(5x + 8) = 0$
 $x = 4, -1\frac{3}{5}$

19. $-x^2 + 8x - 12 = 0$
 $-(x - 6)(x - 2) = 0$
 $x = 6, 2$

20. $-3x^2 + 23x - 30 = 0$
 $-(x - 6)(3x - 5) = 0$
 $x = 6, 1\frac{2}{3}$