

Solving Quadratic Equations (A)

Name: _____

Date: _____

Solve each equation for x.

1. $-3x^2 + 11x - 6 = 0$

11. $-3x^2 + 17x + 56 = 0$

2. $-4x^2 - 27x - 35 = 0$

12. $-5x^2 - 11x - 6 = 0$

3. $5x^2 - 19x - 4 = 0$

13. $-4x^2 - 20x - 21 = 0$

4. $5x^2 + 39x + 28 = 0$

14. $-x^2 + 10x - 24 = 0$

5. $4x^2 - 13x + 10 = 0$

15. $-3x^2 - 14x - 15 = 0$

6. $-2x^2 + 17x - 36 = 0$

16. $5x^2 - 26x + 5 = 0$

7. $2x^2 - 3x - 35 = 0$

17. $3x^2 - 7x + 4 = 0$

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

18. $x^2 + 5x - 36 = 0$

9. $4x^2 - 7x - 15 = 0$

19. $2x^2 + 21x + 49 = 0$

10. $-4x^2 - 20x - 9 = 0$

20. $x^2 + 2x - 24 = 0$

Solving Quadratic Equations (A) Answers

Name: _____

Date: _____

Solve each equation for x.

1. $-3x^2 + 11x - 6 = 0$
 $-(3x - 2)(x - 3) = 0$
 $x = \frac{2}{3}, 3$

2. $-4x^2 - 27x - 35 = 0$
 $-(x + 5)(4x + 7) = 0$
 $x = -5, -1\frac{3}{4}$

3. $5x^2 - 19x - 4 = 0$
 $(x - 4)(5x + 1) = 0$
 $x = 4, -\frac{1}{5}$

4. $5x^2 + 39x + 28 = 0$
 $(5x + 4)(x + 7) = 0$
 $x = -\frac{4}{5}, -7$

5. $4x^2 - 13x + 10 = 0$
 $(4x - 5)(x - 2) = 0$
 $x = 1\frac{1}{4}, 2$

6. $-2x^2 + 17x - 36 = 0$
 $-(2x - 9)(x - 4) = 0$
 $x = 4\frac{1}{2}, 4$

7. $2x^2 - 3x - 35 = 0$
 $(2x + 7)(x - 5) = 0$
 $x = -3\frac{1}{2}, 5$

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

9. $4x^2 - 7x - 15 = 0$
 $(4x + 5)(x - 3) = 0$
 $x = -1\frac{1}{4}, 3$

10. $-4x^2 - 20x - 9 = 0$
 $-(2x + 1)(2x + 9) = 0$
 $x = -\frac{1}{2}, -4\frac{1}{2}$

11. $-3x^2 + 17x + 56 = 0$
 $-(x - 8)(3x + 7) = 0$
 $x = 8, -2\frac{1}{3}$

12. $-5x^2 - 11x - 6 = 0$
 $-(5x + 6)(x + 1) = 0$
 $x = -1\frac{1}{5}, -1$

13. $-4x^2 - 20x - 21 = 0$
 $-(2x + 7)(2x + 3) = 0$
 $x = -3\frac{1}{2}, -1\frac{1}{2}$

14. $-x^2 + 10x - 24 = 0$
 $-(x - 4)(x - 6) = 0$
 $x = 4, 6$

15. $-3x^2 - 14x - 15 = 0$
 $-(3x + 5)(x + 3) = 0$
 $x = -1\frac{2}{3}, -3$

16. $5x^2 - 26x + 5 = 0$
 $(5x - 1)(x - 5) = 0$
 $x = \frac{1}{5}, 5$

17. $3x^2 - 7x + 4 = 0$
 $(x - 1)(3x - 4) = 0$
 $x = 1, 1\frac{1}{3}$

18. $x^2 + 5x - 36 = 0$
 $(x - 4)(x + 9) = 0$
 $x = 4, -9$

19. $2x^2 + 21x + 49 = 0$
 $(x + 7)(2x + 7) = 0$
 $x = -7, -3\frac{1}{2}$

20. $x^2 + 2x - 24 = 0$
 $(x + 6)(x - 4) = 0$
 $x = -6, 4$