

Solving Quadratic Equations (A)

Name: _____

Date: _____

Solve each equation for x.

$$1. \quad 4x^2 - 9 = 0$$

$$11. \quad 4x^2 + 7x - 36 = 0$$

$$2. \quad 3x^2 + 5x - 28 = 0$$

$$12. \quad 2x^2 - 17x + 36 = 0$$

$$3. \quad x^2 + 8x + 7 = 0$$

$$13. \quad x^2 + 5x - 14 = 0$$

$$4. \quad 3x^2 + 7x - 40 = 0$$

$$14. \quad 2x^2 + 23x + 56 = 0$$

$$5. \quad 4x^2 - 1 = 0$$

$$15. \quad 4x^2 - 13x + 9 = 0$$

$$6. \quad 2x^2 - 19x + 24 = 0$$

$$16. \quad 3x^2 - 23x - 8 = 0$$

$$7. \quad 4x^2 + 9x + 5 = 0$$

$$17. \quad 4x^2 - 23x + 28 = 0$$

$$8. \quad 3x^2 + 10x + 8 = 0$$

$$18. \quad 4x^2 - 27x + 35 = 0$$

$$9. \quad 3x^2 + 25x + 8 = 0$$

$$19. \quad 3x^2 - x - 10 = 0$$

$$10. \quad 3x^2 - 28x + 49 = 0$$

$$20. \quad x^2 - 6x + 5 = 0$$

Solving Quadratic Equations (A) Answers

Name: _____

Date: _____

Solve each equation for x.

1. $4x^2 - 9 = 0$

$(2x + 3)(2x - 3) = 0$

$x = -1\frac{1}{2}, 1\frac{1}{2}$

2. $3x^2 + 5x - 28 = 0$

$(x + 4)(3x - 7) = 0$

$x = -4, 2\frac{1}{3}$

3. $x^2 + 8x + 7 = 0$

$(x + 7)(x + 1) = 0$

$x = -7, -1$

4. $3x^2 + 7x - 40 = 0$

$(x + 5)(3x - 8) = 0$

$x = -5, 2\frac{2}{3}$

5. $4x^2 - 1 = 0$

$(2x + 1)(2x - 1) = 0$

$x = -\frac{1}{2}, \frac{1}{2}$

6. $2x^2 - 19x + 24 = 0$

$(2x - 3)(x - 8) = 0$

$x = 1\frac{1}{2}, 8$

7. $4x^2 + 9x + 5 = 0$

$(4x + 5)(x + 1) = 0$

$x = -1\frac{1}{4}, -1$

8. $3x^2 + 10x + 8 = 0$

$(x + 2)(3x + 4) = 0$

$x = -2, -1\frac{1}{3}$

9. $3x^2 + 25x + 8 = 0$

$(3x + 1)(x + 8) = 0$

$x = -\frac{1}{3}, -8$

10. $3x^2 - 28x + 49 = 0$

$(3x - 7)(x - 7) = 0$

$x = 2\frac{1}{3}, 7$

11. $4x^2 + 7x - 36 = 0$

$(4x - 9)(x + 4) = 0$

$x = 2\frac{1}{4}, -4$

12. $2x^2 - 17x + 36 = 0$

$(2x - 9)(x - 4) = 0$

$x = 4\frac{1}{2}, 4$

13. $x^2 + 5x - 14 = 0$

$(x - 2)(x + 7) = 0$

$x = 2, -7$

14. $2x^2 + 23x + 56 = 0$

$(2x + 7)(x + 8) = 0$

$x = -3\frac{1}{2}, -8$

15. $4x^2 - 13x + 9 = 0$

$(x - 1)(4x - 9) = 0$

$x = 1, 2\frac{1}{4}$

16. $3x^2 - 23x - 8 = 0$

$(3x + 1)(x - 8) = 0$

$x = -\frac{1}{3}, 8$

17. $4x^2 - 23x + 28 = 0$

$(x - 4)(4x - 7) = 0$

$x = 4, 1\frac{3}{4}$

18. $4x^2 - 27x + 35 = 0$

$(4x - 7)(x - 5) = 0$

$x = 1\frac{3}{4}, 5$

19. $3x^2 - x - 10 = 0$

$(x - 2)(3x + 5) = 0$

$x = 2, -1\frac{2}{3}$

20. $x^2 - 6x + 5 = 0$

$(x - 5)(x - 1) = 0$

$x = 5, 1$