

Solving Quadratic Equations (D)

Name: _____

Date: _____

Solve each equation for x.

$$1. \quad 63x^2 + 41x + 6 = 0$$

$$11. \quad x^2 - 2x - 35 = 0$$

$$2. \quad 9x^2 - 44x + 32 = 0$$

$$12. \quad 20x^2 + 43x + 21 = 0$$

$$3. \quad 9x^2 + 26x - 3 = 0$$

$$13. \quad 45x^2 + 8x - 4 = 0$$

$$4. \quad 18x^2 + 45x + 7 = 0$$

$$14. \quad 63x^2 - 22x - 8 = 0$$

$$5. \quad 5x^2 - 37x - 72 = 0$$

$$15. \quad 20x^2 - 73x + 63 = 0$$

$$6. \quad 72x^2 + x - 56 = 0$$

$$16. \quad 72x^2 - 23x - 35 = 0$$

$$7. \quad 10x^2 - 19x + 6 = 0$$

$$17. \quad 36x^2 - 12x - 35 = 0$$

$$8. \quad 30x^2 - 17x + 2 = 0$$

$$18. \quad 30x^2 - 23x - 40 = 0$$

$$9. \quad 18x^2 - 45x + 25 = 0$$

$$19. \quad 81x^2 + 90x + 16 = 0$$

$$10. \quad 28x^2 - 27x - 81 = 0$$

$$20. \quad 64x^2 - 64x - 9 = 0$$

Solving Quadratic Equations (D) Answers

Name: _____

Date: _____

Solve each equation for x.

1. $63x^2 + 41x + 6 = 0$
 $(7x + 3)(9x + 2) = 0$
 $x = -\frac{3}{7}, -\frac{2}{9}$

2. $9x^2 - 44x + 32 = 0$
 $(x - 4)(9x - 8) = 0$
 $x = 4, \frac{8}{9}$

3. $9x^2 + 26x - 3 = 0$
 $(9x - 1)(x + 3) = 0$
 $x = \frac{1}{9}, -3$

4. $18x^2 + 45x + 7 = 0$
 $(3x + 7)(6x + 1) = 0$
 $x = -2\frac{1}{3}, -\frac{1}{6}$

5. $5x^2 - 37x - 72 = 0$
 $(x - 9)(5x + 8) = 0$
 $x = 9, -1\frac{3}{5}$

6. $72x^2 + x - 56 = 0$
 $(9x + 8)(8x - 7) = 0$
 $x = -\frac{8}{9}, \frac{7}{8}$

7. $10x^2 - 19x + 6 = 0$
 $(2x - 3)(5x - 2) = 0$
 $x = 1\frac{1}{2}, \frac{2}{5}$

8. $30x^2 - 17x + 2 = 0$
 $(5x - 2)(6x - 1) = 0$
 $x = \frac{2}{5}, \frac{1}{6}$

9. $18x^2 - 45x + 25 = 0$
 $(3x - 5)(6x - 5) = 0$
 $x = 1\frac{2}{3}, \frac{5}{6}$

10. $28x^2 - 27x - 81 = 0$
 $(7x + 9)(4x - 9) = 0$
 $x = -1\frac{2}{7}, 2\frac{1}{4}$

11. $x^2 - 2x - 35 = 0$
 $(x - 7)(x + 5) = 0$
 $x = 7, -5$

12. $20x^2 + 43x + 21 = 0$
 $(4x + 3)(5x + 7) = 0$
 $x = -\frac{3}{4}, -1\frac{2}{5}$

13. $45x^2 + 8x - 4 = 0$
 $(5x + 2)(9x - 2) = 0$
 $x = -\frac{2}{5}, \frac{2}{9}$

14. $63x^2 - 22x - 8 = 0$
 $(9x + 2)(7x - 4) = 0$
 $x = -\frac{2}{9}, \frac{4}{7}$

15. $20x^2 - 73x + 63 = 0$
 $(5x - 7)(4x - 9) = 0$
 $x = 1\frac{2}{5}, 2\frac{1}{4}$

16. $72x^2 - 23x - 35 = 0$
 $(8x - 7)(9x + 5) = 0$
 $x = \frac{7}{8}, -\frac{5}{9}$

17. $36x^2 - 12x - 35 = 0$
 $(6x - 7)(6x + 5) = 0$
 $x = 1\frac{1}{6}, -\frac{5}{6}$

18. $30x^2 - 23x - 40 = 0$
 $(6x + 5)(5x - 8) = 0$
 $x = -\frac{5}{6}, 1\frac{3}{5}$

19. $81x^2 + 90x + 16 = 0$
 $(9x + 2)(9x + 8) = 0$
 $x = -\frac{2}{9}, -\frac{8}{9}$

20. $64x^2 - 64x - 9 = 0$
 $(8x + 1)(8x - 9) = 0$
 $x = -\frac{1}{8}, 1\frac{1}{8}$