

Solving Quadratic Equations (B)

Name: _____

Date: _____

Solve each equation for x.

1. $4x^2 + 8x + 3 = 0$

11. $6x^2 + 5x + 1 = 0$

2. $8x^2 + 14x + 3 = 0$

12. $9x^2 - 55x + 6 = 0$

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

13. $9x^2 + 85x + 36 = 0$

4. $3x^2 + 14x - 49 = 0$

14. $2x^2 + 25x + 63 = 0$

5. $5x^2 - 24x + 16 = 0$

15. $x^2 - 3x - 54 = 0$

6. $6x^2 + 31x + 35 = 0$

16. $8x^2 - 46x + 63 = 0$

7. $9x^2 - 88x + 63 = 0$

17. $8x^2 - 18x - 81 = 0$

8. $8x^2 - 19x - 15 = 0$

18. $3x^2 - 19x + 6 = 0$

9. $8x^2 - 2x - 3 = 0$

19. $9x^2 - 77x + 40 = 0$

10. $8x^2 + 11x + 3 = 0$

20. $5x^2 + 9x + 4 = 0$

Solving Quadratic Equations (B) Answers

Name: _____

Date: _____

Solve each equation for x.

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

2. $8x^2 + 14x + 3 = 0$
 $(2x + 3)(4x + 1) = 0$
 $x = -1\frac{1}{2}, -\frac{1}{4}$

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

4. $3x^2 + 14x - 49 = 0$
 $(3x - 7)(x + 7) = 0$
 $x = 2\frac{1}{3}, -7$

5. $5x^2 - 24x + 16 = 0$
 $(5x - 4)(x - 4) = 0$
 $x = \frac{4}{5}, 4$

6. $6x^2 + 31x + 35 = 0$
 $(3x + 5)(2x + 7) = 0$
 $x = -1\frac{2}{3}, -3\frac{1}{2}$

7. $9x^2 - 88x + 63 = 0$
 $(9x - 7)(x - 9) = 0$
 $x = \frac{7}{9}, 9$

8. $8x^2 - 19x - 15 = 0$
 $(x - 3)(8x + 5) = 0$
 $x = 3, -\frac{5}{8}$

9. $8x^2 - 2x - 3 = 0$
 $(4x - 3)(2x + 1) = 0$
 $x = \frac{3}{4}, -\frac{1}{2}$

10. $8x^2 + 11x + 3 = 0$
 $(x + 1)(8x + 3) = 0$
 $x = -1, -\frac{3}{8}$

11. $6x^2 + 5x + 1 = 0$
 $(2x + 1)(3x + 1) = 0$
 $x = -\frac{1}{2}, -\frac{1}{3}$

12. $9x^2 - 55x + 6 = 0$
 $(9x - 1)(x - 6) = 0$
 $x = \frac{1}{9}, 6$

13. $9x^2 + 85x + 36 = 0$
 $(9x + 4)(x + 9) = 0$
 $x = -\frac{4}{9}, -9$

14. $2x^2 + 25x + 63 = 0$
 $(2x + 7)(x + 9) = 0$
 $x = -3\frac{1}{2}, -9$

15. $x^2 - 3x - 54 = 0$
 $(x - 9)(x + 6) = 0$
 $x = 9, -6$

16. $8x^2 - 46x + 63 = 0$
 $(4x - 9)(2x - 7) = 0$
 $x = 2\frac{1}{4}, 3\frac{1}{2}$

17. $8x^2 - 18x - 81 = 0$
 $(4x + 9)(2x - 9) = 0$
 $x = -2\frac{1}{4}, 4\frac{1}{2}$

18. $3x^2 - 19x + 6 = 0$
 $(3x - 1)(x - 6) = 0$
 $x = \frac{1}{3}, 6$

19. $9x^2 - 77x + 40 = 0$
 $(x - 8)(9x - 5) = 0$
 $x = 8, \frac{5}{9}$

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