

Solving Quadratic Equations (A)

Name: _____

Date: _____

Solve each equation for x.

$$1. \ -2x^2 - 19x - 45 = 0$$

$$11. \ -7x^2 + 33x - 20 = 0$$

$$2. \ -7x^2 + 55x + 72 = 0$$

$$12. \ 6x^2 + x - 12 = 0$$

$$3. \ 8x^2 - 59x - 40 = 0$$

$$13. \ -7x^2 - 11x - 4 = 0$$

$$4. \ 8x^2 + 35x - 25 = 0$$

$$14. \ 8x^2 - 33x + 4 = 0$$

$$5. \ -8x^2 + 9x + 14 = 0$$

$$15. \ 2x^2 + x - 36 = 0$$

$$6. \ 3x^2 - 4x - 32 = 0$$

$$16. \ -8x^2 + 25x - 3 = 0$$

$$7. \ 8x^2 + 41x - 42 = 0$$

$$17. \ -5x^2 - 16x + 16 = 0$$

$$8. \ 8x^2 - 6x + 1 = 0$$

$$18. \ -5x^2 - 36x + 32 = 0$$

$$9. \ 4x^2 + 9x + 2 = 0$$

$$19. \ 9x^2 - 4x - 5 = 0$$

$$10. \ -3x^2 + 32x - 64 = 0$$

$$20. \ 5x^2 - 22x - 48 = 0$$

Solving Quadratic Equations (A) Answers

Name: _____

Date: _____

Solve each equation for x.

1. $-2x^2 - 19x - 45 = 0$
 $-(x + 5)(2x + 9) = 0$
 $x = -5, -4\frac{1}{2}$

11. $-7x^2 + 33x - 20 = 0$
 $-(x - 4)(7x - 5) = 0$
 $x = 4, \frac{5}{7}$

2. $-7x^2 + 55x + 72 = 0$
 $-(7x + 8)(x - 9) = 0$
 $x = -1\frac{1}{7}, 9$

12. $6x^2 + x - 12 = 0$
 $(3x - 4)(2x + 3) = 0$
 $x = 1\frac{1}{3}, -1\frac{1}{2}$

3. $8x^2 - 59x - 40 = 0$
 $(x - 8)(8x + 5) = 0$
 $x = 8, -\frac{5}{8}$

13. $-7x^2 - 11x - 4 = 0$
 $-(x + 1)(7x + 4) = 0$
 $x = -1, -\frac{4}{7}$

4. $8x^2 + 35x - 25 = 0$
 $(8x - 5)(x + 5) = 0$
 $x = \frac{5}{8}, -5$

14. $8x^2 - 33x + 4 = 0$
 $(8x - 1)(x - 4) = 0$
 $x = \frac{1}{8}, 4$

5. $-8x^2 + 9x + 14 = 0$
 $-(8x + 7)(x - 2) = 0$
 $x = -\frac{7}{8}, 2$

15. $2x^2 + x - 36 = 0$
 $(x - 4)(2x + 9) = 0$
 $x = 4, -4\frac{1}{2}$

6. $3x^2 - 4x - 32 = 0$
 $(3x + 8)(x - 4) = 0$
 $x = -2\frac{2}{3}, 4$

16. $-8x^2 + 25x - 3 = 0$
 $-(x - 3)(8x - 1) = 0$
 $x = 3, \frac{1}{8}$

7. $8x^2 + 41x - 42 = 0$
 $(8x - 7)(x + 6) = 0$
 $x = \frac{7}{8}, -6$

17. $-5x^2 - 16x + 16 = 0$
 $-(5x - 4)(x + 4) = 0$
 $x = \frac{4}{5}, -4$

8. $8x^2 - 6x + 1 = 0$
 $(4x - 1)(2x - 1) = 0$
 $x = \frac{1}{4}, \frac{1}{2}$

18. $-5x^2 - 36x + 32 = 0$
 $-(5x - 4)(x + 8) = 0$
 $x = \frac{4}{5}, -8$

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

19. $9x^2 - 4x - 5 = 0$
 $(x - 1)(9x + 5) = 0$
 $x = 1, -\frac{5}{9}$

10. $-3x^2 + 32x - 64 = 0$
 $-(3x - 8)(x - 8) = 0$
 $x = 2\frac{2}{3}, 8$

20. $5x^2 - 22x - 48 = 0$
 $(x - 6)(5x + 8) = 0$
 $x = 6, -1\frac{3}{5}$