

Solving Quadratic Equations (F)

Name: _____

Date: _____

Solve each equation for x.

1. $-8x^2 + 18x + 5 = 0$

11. $3x^2 + 25x - 18 = 0$

2. $9x^2 - 49x - 30 = 0$

12. $9x^2 - 15x - 14 = 0$

3. $-x^2 - 2x - 1 = 0$

13. $-4x^2 - 19x + 5 = 0$

4. $6x^2 - 43x + 72 = 0$

14. $7x^2 + 55x + 42 = 0$

5. $6x^2 - 11x - 21 = 0$

15. $-5x^2 - 9x - 4 = 0$

6. $4x^2 - 81 = 0$

16. $8x^2 + 75x + 27 = 0$

7. $8x^2 + 61x - 24 = 0$

17. $x^2 + 3x - 54 = 0$

8. $-6x^2 + 17x + 28 = 0$

18. $-3x^2 + 25x - 28 = 0$

9. $-6x^2 + 11x + 7 = 0$

19. $6x^2 + 41x - 56 = 0$

10. $-8x^2 + 37x + 15 = 0$

20. $-7x^2 - 47x + 14 = 0$

Solving Quadratic Equations (F) Answers

Name: _____

Date: _____

Solve each equation for x.

- $-8x^2 + 18x + 5 = 0$
 $-(2x - 5)(4x + 1) = 0$
 $x = 2\frac{1}{2}, -\frac{1}{4}$
- $9x^2 - 49x - 30 = 0$
 $(9x + 5)(x - 6) = 0$
 $x = -\frac{5}{9}, 6$
- $-x^2 - 2x - 1 = 0$
 $-(x + 1)(x + 1) = -(x + 1)^2 = 0$
 $x = -1$
- $6x^2 - 43x + 72 = 0$
 $(2x - 9)(3x - 8) = 0$
 $x = 4\frac{1}{2}, 2\frac{2}{3}$
- $6x^2 - 11x - 21 = 0$
 $(x - 3)(6x + 7) = 0$
 $x = 3, -1\frac{1}{6}$
- $4x^2 - 81 = 0$
 $(2x - 9)(2x + 9) = 0$
 $x = 4\frac{1}{2}, -4\frac{1}{2}$
- $8x^2 + 61x - 24 = 0$
 $(8x - 3)(x + 8) = 0$
 $x = \frac{3}{8}, -8$
- $-6x^2 + 17x + 28 = 0$
 $-(x - 4)(6x + 7) = 0$
 $x = 4, -1\frac{1}{6}$
- $-6x^2 + 11x + 7 = 0$
 $-(2x + 1)(3x - 7) = 0$
 $x = -\frac{1}{2}, 2\frac{1}{3}$
- $-8x^2 + 37x + 15 = 0$
 $-(8x + 3)(x - 5) = 0$
 $x = -\frac{3}{8}, 5$
- $3x^2 + 25x - 18 = 0$
 $(x + 9)(3x - 2) = 0$
 $x = -9, \frac{2}{3}$
- $9x^2 - 15x - 14 = 0$
 $(3x - 7)(3x + 2) = 0$
 $x = 2\frac{1}{3}, -\frac{2}{3}$
- $-4x^2 - 19x + 5 = 0$
 $-(4x - 1)(x + 5) = 0$
 $x = \frac{1}{4}, -5$
- $7x^2 + 55x + 42 = 0$
 $(x + 7)(7x + 6) = 0$
 $x = -7, -\frac{6}{7}$
- $-5x^2 - 9x - 4 = 0$
 $-(5x + 4)(x + 1) = 0$
 $x = -\frac{4}{5}, -1$
- $8x^2 + 75x + 27 = 0$
 $(x + 9)(8x + 3) = 0$
 $x = -9, -\frac{3}{8}$
- $x^2 + 3x - 54 = 0$
 $(x + 9)(x - 6) = 0$
 $x = -9, 6$
- $-3x^2 + 25x - 28 = 0$
 $-(x - 7)(3x - 4) = 0$
 $x = 7, 1\frac{1}{3}$
- $6x^2 + 41x - 56 = 0$
 $(x + 8)(6x - 7) = 0$
 $x = -8, 1\frac{1}{6}$
- $-7x^2 - 47x + 14 = 0$
 $-(x + 7)(7x - 2) = 0$
 $x = -7, \frac{2}{7}$