

Solving Quadratic Equations (J)

Name: _____

Date: _____

Solve each equation for x.

1. $-12x^2 + 8x + 15 = 0$

11. $-12x^2 - 13x + 35 = 0$

2. $6x^2 + 29x + 20 = 0$

12. $-40x^2 - 47x + 45 = 0$

3. $-16x^2 + 58x - 7 = 0$

13. $-16x^2 + 14x - 3 = 0$

4. $-20x^2 + 21x + 5 = 0$

14. $-25x^2 - 70x - 48 = 0$

5. $24x^2 - 2x - 1 = 0$

15. $16x^2 - 8x - 15 = 0$

6. $28x^2 - 37x + 12 = 0$

16. $-27x^2 + 51x + 56 = 0$

7. $5x^2 + 11x - 12 = 0$

17. $20x^2 - 9x - 18 = 0$

8. $4x^2 + 16x - 9 = 0$

18. $-25x^2 + 55x - 18 = 0$

9. $20x^2 + 23x - 21 = 0$

19. $-56x^2 + 13x + 30 = 0$

10. $14x^2 - 39x + 27 = 0$

20. $-6x^2 + 5x + 25 = 0$

Solving Quadratic Equations (J) Answers

Name: _____

Date: _____

Solve each equation for x.

- $-12x^2 + 8x + 15 = 0$
 $-(2x - 3)(6x + 5) = 0$
 $x = 1\frac{1}{2}, -\frac{5}{6}$
- $6x^2 + 29x + 20 = 0$
 $(x + 4)(6x + 5) = 0$
 $x = -4, -\frac{5}{6}$
- $-16x^2 + 58x - 7 = 0$
 $-(2x - 7)(8x - 1) = 0$
 $x = 3\frac{1}{2}, \frac{1}{8}$
- $-20x^2 + 21x + 5 = 0$
 $-(5x + 1)(4x - 5) = 0$
 $x = -\frac{1}{5}, 1\frac{1}{4}$
- $24x^2 - 2x - 1 = 0$
 $(6x + 1)(4x - 1) = 0$
 $x = -\frac{1}{6}, \frac{1}{4}$
- $28x^2 - 37x + 12 = 0$
 $(7x - 4)(4x - 3) = 0$
 $x = \frac{4}{7}, \frac{3}{4}$
- $5x^2 + 11x - 12 = 0$
 $(5x - 4)(x + 3) = 0$
 $x = \frac{4}{5}, -3$
- $4x^2 + 16x - 9 = 0$
 $(2x + 9)(2x - 1) = 0$
 $x = -4\frac{1}{2}, \frac{1}{2}$
- $20x^2 + 23x - 21 = 0$
 $(5x - 3)(4x + 7) = 0$
 $x = \frac{3}{5}, -1\frac{3}{4}$
- $14x^2 - 39x + 27 = 0$
 $(7x - 9)(2x - 3) = 0$
 $x = 1\frac{2}{7}, 1\frac{1}{2}$
- $-12x^2 - 13x + 35 = 0$
 $-(4x - 5)(3x + 7) = 0$
 $x = 1\frac{1}{4}, -2\frac{1}{3}$
- $-40x^2 - 47x + 45 = 0$
 $-(8x - 5)(5x + 9) = 0$
 $x = \frac{5}{8}, -1\frac{4}{5}$
- $-16x^2 + 14x - 3 = 0$
 $-(2x - 1)(8x - 3) = 0$
 $x = \frac{1}{2}, \frac{3}{8}$
- $-25x^2 - 70x - 48 = 0$
 $-(5x + 6)(5x + 8) = 0$
 $x = -1\frac{1}{5}, -1\frac{3}{5}$
- $16x^2 - 8x - 15 = 0$
 $(4x + 3)(4x - 5) = 0$
 $x = -\frac{3}{4}, 1\frac{1}{4}$
- $-27x^2 + 51x + 56 = 0$
 $-(9x + 7)(3x - 8) = 0$
 $x = -\frac{7}{9}, 2\frac{2}{3}$
- $20x^2 - 9x - 18 = 0$
 $(5x - 6)(4x + 3) = 0$
 $x = 1\frac{1}{5}, -\frac{3}{4}$
- $-25x^2 + 55x - 18 = 0$
 $-(5x - 9)(5x - 2) = 0$
 $x = 1\frac{4}{5}, \frac{2}{5}$
- $-56x^2 + 13x + 30 = 0$
 $-(8x + 5)(7x - 6) = 0$
 $x = -\frac{5}{8}, \frac{6}{7}$
- $-6x^2 + 5x + 25 = 0$
 $-(3x + 5)(2x - 5) = 0$
 $x = -1\frac{2}{3}, 2\frac{1}{2}$