

# Solving Quadratic Equations (J)

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Solve each equation for x.

1.  $6x^2 - 45x + 84 = 0$

11.  $25x^2 + 90x + 80 = 0$

2.  $8x^2 + 42x - 98 = 0$

12.  $-10x^2 - 15x - 5 = 0$

3.  $-8x^2 - 4x + 144 = 0$

13.  $12x^2 - 52x + 16 = 0$

4.  $-6x^2 + 33x - 27 = 0$

14.  $10x^2 - 35x + 30 = 0$

5.  $20x^2 - 4x - 24 = 0$

15.  $20x^2 + 24x - 108 = 0$

6.  $20x^2 + 20x - 15 = 0$

16.  $12x^2 - 12x - 189 = 0$

7.  $15x^2 + 99x + 120 = 0$

17.  $20x^2 - 55x + 30 = 0$

8.  $20x^2 + 95x - 150 = 0$

18.  $15x^2 + 65x - 150 = 0$

9.  $10x^2 - 5x - 5 = 0$

19.  $20x^2 + 5x - 25 = 0$

10.  $20x^2 - 85x + 90 = 0$

20.  $8x^2 + 66x + 16 = 0$

# Solving Quadratic Equations (J) Answers

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Solve each equation for x.

- $6x^2 - 45x + 84 = 0$   
 $3(2x - 7)(x - 4) = 0$   
 $x = 3\frac{1}{2}, 4$
- $8x^2 + 42x - 98 = 0$   
 $2(x + 7)(4x - 7) = 0$   
 $x = -7, 1\frac{3}{4}$
- $-8x^2 - 4x + 144 = 0$   
 $-4(x - 4)(2x + 9) = 0$   
 $x = 4, -4\frac{1}{2}$
- $-6x^2 + 33x - 27 = 0$   
 $-3(2x - 9)(x - 1) = 0$   
 $x = 4\frac{1}{2}, 1$
- $20x^2 - 4x - 24 = 0$   
 $4(x + 1)(5x - 6) = 0$   
 $x = -1, 1\frac{1}{5}$
- $20x^2 + 20x - 15 = 0$   
 $5(2x - 1)(2x + 3) = 0$   
 $x = \frac{1}{2}, -1\frac{1}{2}$
- $15x^2 + 99x + 120 = 0$   
 $3(x + 5)(5x + 8) = 0$   
 $x = -5, -1\frac{3}{5}$
- $20x^2 + 95x - 150 = 0$   
 $5(4x - 5)(x + 6) = 0$   
 $x = 1\frac{1}{4}, -6$
- $10x^2 - 5x - 5 = 0$   
 $5(x - 1)(2x + 1) = 0$   
 $x = 1, -\frac{1}{2}$
- $20x^2 - 85x + 90 = 0$   
 $5(x - 2)(4x - 9) = 0$   
 $x = 2, 2\frac{1}{4}$
- $25x^2 + 90x + 80 = 0$   
 $5(x + 2)(5x + 8) = 0$   
 $x = -2, -1\frac{3}{5}$
- $-10x^2 - 15x - 5 = 0$   
 $-5(2x + 1)(x + 1) = 0$   
 $x = -\frac{1}{2}, -1$
- $12x^2 - 52x + 16 = 0$   
 $4(3x - 1)(x - 4) = 0$   
 $x = \frac{1}{3}, 4$
- $10x^2 - 35x + 30 = 0$   
 $5(2x - 3)(x - 2) = 0$   
 $x = 1\frac{1}{2}, 2$
- $20x^2 + 24x - 108 = 0$   
 $4(x + 3)(5x - 9) = 0$   
 $x = -3, 1\frac{4}{5}$
- $12x^2 - 12x - 189 = 0$   
 $3(2x + 7)(2x - 9) = 0$   
 $x = -3\frac{1}{2}, 4\frac{1}{2}$
- $20x^2 - 55x + 30 = 0$   
 $5(x - 2)(4x - 3) = 0$   
 $x = 2, \frac{3}{4}$
- $15x^2 + 65x - 150 = 0$   
 $5(3x - 5)(x + 6) = 0$   
 $x = 1\frac{2}{3}, -6$
- $20x^2 + 5x - 25 = 0$   
 $5(4x + 5)(x - 1) = 0$   
 $x = -1\frac{1}{4}, 1$
- $8x^2 + 66x + 16 = 0$   
 $2(x + 8)(4x + 1) = 0$   
 $x = -8, -\frac{1}{4}$