

# Solving Quadratic Equations (G)

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

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

Solve each equation for x.

1.  $2x^2 - 7x - 49 = 0$

11.  $4x^2 - 15x - 4 = 0$

2.  $-5x^2 + 17x + 12 = 0$

12.  $-3x^2 + 16x + 64 = 0$

3.  $4x^2 + 16x + 15 = 0$

13.  $x^2 + 4x + 3 = 0$

4.  $4x^2 + 39x + 56 = 0$

14.  $-5x^2 + 18x + 8 = 0$

5.  $-5x^2 - 18x - 16 = 0$

15.  $3x^2 - 14x + 16 = 0$

6.  $4x^2 - 21x - 49 = 0$

16.  $4x^2 + 25x + 25 = 0$

7.  $-2x^2 - 3x + 20 = 0$

17.  $-2x^2 + 11x - 5 = 0$

8.  $-4x^2 - 27x + 7 = 0$

18.  $-5x^2 - 16x + 45 = 0$

9.  $5x^2 + 12x + 7 = 0$

19.  $-3x^2 + 20x + 63 = 0$

10.  $5x^2 - 6x + 1 = 0$

20.  $-5x^2 - 33x - 40 = 0$

# Solving Quadratic Equations (G) Answers

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

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

Solve each equation for x.

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

2.  $-5x^2 + 17x + 12 = 0$   
 $-(x - 4)(5x + 3) = 0$   
 $x = 4, -\frac{3}{5}$

3.  $4x^2 + 16x + 15 = 0$   
 $(2x + 5)(2x + 3) = 0$   
 $x = -2\frac{1}{2}, -1\frac{1}{2}$

4.  $4x^2 + 39x + 56 = 0$   
 $(x + 8)(4x + 7) = 0$   
 $x = -8, -1\frac{3}{4}$

5.  $-5x^2 - 18x - 16 = 0$   
 $-(x + 2)(5x + 8) = 0$   
 $x = -2, -1\frac{3}{5}$

6.  $4x^2 - 21x - 49 = 0$   
 $(x - 7)(4x + 7) = 0$   
 $x = 7, -1\frac{3}{4}$

7.  $-2x^2 - 3x + 20 = 0$   
 $-(x + 4)(2x - 5) = 0$   
 $x = -4, 2\frac{1}{2}$

8.  $-4x^2 - 27x + 7 = 0$   
 $-(4x - 1)(x + 7) = 0$   
 $x = \frac{1}{4}, -7$

9.  $5x^2 + 12x + 7 = 0$   
 $(5x + 7)(x + 1) = 0$   
 $x = -1\frac{2}{5}, -1$

10.  $5x^2 - 6x + 1 = 0$   
 $(5x - 1)(x - 1) = 0$   
 $x = \frac{1}{5}, 1$

11.  $4x^2 - 15x - 4 = 0$   
 $(x - 4)(4x + 1) = 0$   
 $x = 4, -\frac{1}{4}$

12.  $-3x^2 + 16x + 64 = 0$   
 $-(3x + 8)(x - 8) = 0$   
 $x = -2\frac{2}{3}, 8$

13.  $x^2 + 4x + 3 = 0$   
 $(x + 3)(x + 1) = 0$   
 $x = -3, -1$

14.  $-5x^2 + 18x + 8 = 0$   
 $-(5x + 2)(x - 4) = 0$   
 $x = -\frac{2}{5}, 4$

15.  $3x^2 - 14x + 16 = 0$   
 $(3x - 8)(x - 2) = 0$   
 $x = 2\frac{2}{3}, 2$

16.  $4x^2 + 25x + 25 = 0$   
 $(x + 5)(4x + 5) = 0$   
 $x = -5, -1\frac{1}{4}$

17.  $-2x^2 + 11x - 5 = 0$   
 $-(2x - 1)(x - 5) = 0$   
 $x = \frac{1}{2}, 5$

18.  $-5x^2 - 16x + 45 = 0$   
 $-(5x - 9)(x + 5) = 0$   
 $x = 1\frac{4}{5}, -5$

19.  $-3x^2 + 20x + 63 = 0$   
 $-(x - 9)(3x + 7) = 0$   
 $x = 9, -2\frac{1}{3}$

20.  $-5x^2 - 33x - 40 = 0$   
 $-(5x + 8)(x + 5) = 0$   
 $x = -1\frac{3}{5}, -5$