

# Solving Quadratic Equations (G)

Solve each equation for x

1.  $x^2 - 4x - 17 = 4$

7.  $x^2 - 17x + 31 = -41$

2.  $x^2 + 5x - 5 = 19$

8.  $x^2 + 6x - 15 = 1$

3.  $x^2 + 2x - 5 = 43$

9.  $x^2 + 3x - 2 = 2$

4.  $x^2 - 3x - 44 = 10$

10.  $x^2 + 5x - 1 = 13$

5.  $x^2 + 9x + 6 = -2$

11.  $x^2 + 5x - 1 = 5$

6.  $x^2 + 4x - 4 = 41$

12.  $x^2 - 10x + 14 = -11$

# Solving Quadratic Equations (G) Answers

Solve each equation for x

1.  $x^2 - 4x - 17 = 4$   
 $x^2 - 4x - 21 = 0$   
 $(x + 3)(x - 7) = 0$   
 $x = -3, 7$

7.  $x^2 - 17x + 31 = -41$   
 $x^2 - 17x + 72 = 0$   
 $(x - 9)(x - 8) = 0$   
 $x = 9, 8$

2.  $x^2 + 5x - 5 = 19$   
 $x^2 + 5x - 24 = 0$   
 $(x + 8)(x - 3) = 0$   
 $x = -8, 3$

8.  $x^2 + 6x - 15 = 1$   
 $x^2 + 6x - 16 = 0$   
 $(x + 8)(x - 2) = 0$   
 $x = -8, 2$

3.  $x^2 + 2x - 5 = 43$   
 $x^2 + 2x - 48 = 0$   
 $(x - 6)(x + 8) = 0$   
 $x = 6, -8$

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

4.  $x^2 - 3x - 44 = 10$   
 $x^2 - 3x - 54 = 0$   
 $(x + 6)(x - 9) = 0$   
 $x = -6, 9$

10.  $x^2 + 5x - 1 = 13$   
 $x^2 + 5x - 14 = 0$   
 $(x + 7)(x - 2) = 0$   
 $x = -7, 2$

5.  $x^2 + 9x + 6 = -2$   
 $x^2 + 9x + 8 = 0$   
 $(x + 8)(x + 1) = 0$   
 $x = -8, -1$

11.  $x^2 + 5x - 1 = 5$   
 $x^2 + 5x - 6 = 0$   
 $(x + 6)(x - 1) = 0$   
 $x = -6, 1$

6.  $x^2 + 4x - 4 = 41$   
 $x^2 + 4x - 45 = 0$   
 $(x - 5)(x + 9) = 0$   
 $x = 5, -9$

12.  $x^2 - 10x + 14 = -11$   
 $x^2 - 10x + 25 = 0$   
 $(x - 5)(x - 5) = 0$   
 $x = 5$