

# Solving Quadratic Equations (I)

Solve each equation for x

1.  $x^2 - 5x - 12 = 2$

7.  $x^2 - 6x - 4 = 3$

2.  $x^2 - 7x - 2 = 16$

8.  $x^2 + 12x + 1 = -31$

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

9.  $x^2 + 3x - 43 = 11$

4.  $x^2 - 26 = 38$

10.  $x^2 + 9x + 14 = 0$

5.  $x^2 - 17x + 13 = -59$

11.  $x^2 + 15x + 50 = -4$

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

12.  $x^2 - 6x + 7 = -2$

# Solving Quadratic Equations (I) Answers

Solve each equation for x

1.  $x^2 - 5x - 12 = 2$   
 $x^2 - 5x - 14 = 0$   
 $(x - 7)(x + 2) = 0$   
 $x = 7, -2$

7.  $x^2 - 6x - 4 = 3$   
 $x^2 - 6x - 7 = 0$   
 $(x - 7)(x + 1) = 0$   
 $x = 7, -1$

2.  $x^2 - 7x - 2 = 16$   
 $x^2 - 7x - 18 = 0$   
 $(x + 2)(x - 9) = 0$   
 $x = -2, 9$

8.  $x^2 + 12x + 1 = -31$   
 $x^2 + 12x + 32 = 0$   
 $(x + 8)(x + 4) = 0$   
 $x = -8, -4$

3.  $x^2 - 4x - 1 = 4$   
 $x^2 - 4x - 5 = 0$   
 $(x - 5)(x + 1) = 0$   
 $x = 5, -1$

9.  $x^2 + 3x - 43 = 11$   
 $x^2 + 3x - 54 = 0$   
 $(x + 9)(x - 6) = 0$   
 $x = -9, 6$

4.  $x^2 - 26 = 38$   
 $x^2 - 64 = 0$   
 $(x - 8)(x + 8) = 0$   
 $x = 8, -8$

10.  $x^2 + 9x + 14 = 0$   
 $x^2 + 9x + 14 = 0$   
 $(x + 2)(x + 7) = 0$   
 $x = -2, -7$

5.  $x^2 - 17x + 13 = -59$   
 $x^2 - 17x + 72 = 0$   
 $(x - 9)(x - 8) = 0$   
 $x = 9, 8$

11.  $x^2 + 15x + 50 = -4$   
 $x^2 + 15x + 54 = 0$   
 $(x + 6)(x + 9) = 0$   
 $x = -6, -9$

6.  $x^2 - 4x - 1 = 4$   
 $x^2 - 4x - 5 = 0$   
 $(x + 1)(x - 5) = 0$   
 $x = -1, 5$

12.  $x^2 - 6x + 7 = -2$   
 $x^2 - 6x + 9 = 0$   
 $(x - 3)(x - 3) = 0$   
 $x = 3$