

# Solving Quadratic Equations (A)

Solve each equation for x

1.  $2x^2 - 4x - 6 = 0$

7.  $x^2 - 5x + 4 = 0$

2.  $-2x^2 - 25x - 72 = 0$

8.  $2x^2 - 22x + 56 = 0$

3.  $2x^2 - 10x + 8 = 0$

9.  $-x^2 + 8x - 12 = 0$

4.  $2x^2 + 27x + 81 = 0$

10.  $2x^2 + 11x - 6 = 0$

5.  $4x^2 - 6x - 4 = 0$

11.  $-2x^2 + 5x + 3 = 0$

6.  $-2x^2 + 8x + 64 = 0$

12.  $-2x^2 - 10x + 12 = 0$

# Solving Quadratic Equations (A) Answers

Solve each equation for x

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

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

2.  $-2x^2 - 25x - 72 = 0$   
 $(2x + 9)(x + 8) = 0$   
 $x = -4\frac{1}{2}, -8$

8.  $2x^2 - 22x + 56 = 0$   
 $(x - 7)(2x - 8) = 0$   
 $x = 7, 4$

3.  $2x^2 - 10x + 8 = 0$   
 $(x - 4)(2x - 2) = 0$   
 $x = 4, 1$

9.  $-x^2 + 8x - 12 = 0$   
 $-(x - 2)(x - 6) = 0$   
 $x = 2, 6$

4.  $2x^2 + 27x + 81 = 0$   
 $(x + 9)(2x + 9) = 0$   
 $x = -9, -4\frac{1}{2}$

10.  $2x^2 + 11x - 6 = 0$   
 $(x + 6)(2x - 1) = 0$   
 $x = -6, \frac{1}{2}$

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

11.  $-2x^2 + 5x + 3 = 0$   
 $-(2x + 1)(x - 3) = 0$   
 $x = -\frac{1}{2}, 3$

6.  $-2x^2 + 8x + 64 = 0$   
 $(2x + 8)(x - 8) = 0$   
 $x = -4, 8$

12.  $-2x^2 - 10x + 12 = 0$   
 $-(x + 6)(2x - 2) = 0$   
 $x = -6, 1$