

# Résolution d'Équations Quadratiques (E)

Calculer les solutions des équations suivantes.

1.  $x^2 - 2x - 13 = 35$

7.  $x^2 - 4x - 11 = 10$

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

8.  $4x^2 + 22x + 5 = -13$

3.  $2x^2 - 2x - 35 = 5$

9.  $x^2 + 10x + 7 = -9$

4.  $2x^2 + 20x + 28 = -14$

10.  $2x^2 + 13x + 15 = -6$

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

11.  $x^2 - 3x + 1 = -1$

6.  $4x^2 - 14x + 9 = -1$

12.  $x^2 + 11x + 11 = -13$

## Résolution d'Équations Quadratiques (E) Réponses

Calculer les solutions des équations suivantes.

1.  $x^2 - 2x - 13 = 35$   
 $x^2 - 2x - 48 = 0$   
 $(x - 8)(x + 6) = 0$   
 $x = 8, -6$

7.  $x^2 - 4x - 11 = 10$   
 $x^2 - 4x - 21 = 0$   
 $(x + 3)(x - 7) = 0$   
 $x = -3, 7$

2.  $4x^2 - 10x + 3 = -3$   
 $4x^2 - 10x + 6 = 0$   
 $(2x - 2)(2x - 3) = 0$   
 $x = 1, 1\frac{1}{2}$

8.  $4x^2 + 22x + 5 = -13$   
 $4x^2 + 22x + 18 = 0$   
 $(2x + 2)(2x + 9) = 0$   
 $x = -1, -4\frac{1}{2}$

3.  $2x^2 - 2x - 35 = 5$   
 $2x^2 - 2x - 40 = 0$   
 $(2x + 8)(x - 5) = 0$   
 $x = -4, 5$

9.  $x^2 + 10x + 7 = -9$   
 $x^2 + 10x + 16 = 0$   
 $(x + 8)(x + 2) = 0$   
 $x = -8, -2$

4.  $2x^2 + 20x + 28 = -14$   
 $2x^2 + 20x + 42 = 0$   
 $(x + 7)(2x + 6) = 0$   
 $x = -7, -3$

10.  $2x^2 + 13x + 15 = -6$   
 $2x^2 + 13x + 21 = 0$   
 $(x + 3)(2x + 7) = 0$   
 $x = -3, -3\frac{1}{2}$

5.  $2x^2 + 7x - 5 = 4$   
 $2x^2 + 7x - 9 = 0$   
 $(x - 1)(2x + 9) = 0$   
 $x = 1, -4\frac{1}{2}$

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

6.  $4x^2 - 14x + 9 = -1$   
 $4x^2 - 14x + 10 = 0$   
 $(2x - 2)(2x - 5) = 0$   
 $x = 1, 2\frac{1}{2}$

12.  $x^2 + 11x + 11 = -13$   
 $x^2 + 11x + 24 = 0$   
 $(x + 8)(x + 3) = 0$   
 $x = -8, -3$