

# Résolution d'Équations Quadratiques (G)

Calculer les solutions des équations suivantes.

1.  $2x^2 - 13x + 15 = 0$

7.  $2x^2 + 3x - 4 = 16$

2.  $-4x^2 - 10x + 14 = 0$

8.  $4x^2 - 10x - 9 = 27$

3.  $-2x^2 + 15x + 6 = -2$

9.  $-2x^2 + 4x + 13 = -17$

4.  $-4x^2 + 22x - 24 = 4$

10.  $2x^2 + 10x + 4 = -8$

5.  $2x^2 - 3x - 2 = 18$

11.  $x^2 - x - 12 = 18$

6.  $2x^2 + 4x - 28 = 20$

12.  $-4x^2 - 4x + 13 = -11$

## Résolution d'Équations Quadratiques (G) Réponses

Calculer les solutions des équations suivantes.

1.  $2x^2 - 13x + 15 = 0$   
 $2x^2 - 13x + 15 = 0$   
 $(2x - 3)(x - 5) = 0$   
 $x = 1 \frac{1}{2}, 5$

2.  $-4x^2 - 10x + 14 = 0$   
 $-4x^2 - 10x + 14 = 0$   
 $(2x + 7)(2x - 2) = 0$   
 $x = -3 \frac{1}{2}, 1$

3.  $-2x^2 + 15x + 6 = -2$   
 $-2x^2 + 15x + 8 = 0$   
 $(x - 8)(2x + 1) = 0$   
 $x = 8, -\frac{1}{2}$

4.  $-4x^2 + 22x - 24 = 4$   
 $-4x^2 + 22x - 28 = 0$   
 $-(2x - 4)(2x - 7) = 0$   
 $x = 2, 3 \frac{1}{2}$

5.  $2x^2 - 3x - 2 = 18$   
 $2x^2 - 3x - 20 = 0$   
 $(x - 4)(2x + 5) = 0$   
 $x = 4, -2 \frac{1}{2}$

6.  $2x^2 + 4x - 28 = 20$   
 $2x^2 + 4x - 48 = 0$   
 $(x + 6)(2x - 8) = 0$   
 $x = -6, 4$

7.  $2x^2 + 3x - 4 = 16$   
 $2x^2 + 3x - 20 = 0$   
 $(x + 4)(2x - 5) = 0$   
 $x = -4, 2 \frac{1}{2}$

8.  $4x^2 - 10x - 9 = 27$   
 $4x^2 - 10x - 36 = 0$   
 $(2x - 9)(2x + 4) = 0$   
 $x = 4 \frac{1}{2}, -2$

9.  $-2x^2 + 4x + 13 = -17$   
 $-2x^2 + 4x + 30 = 0$   
 $-(2x + 6)(x - 5) = 0$   
 $x = -3, 5$

10.  $2x^2 + 10x + 4 = -8$   
 $2x^2 + 10x + 12 = 0$   
 $(2x + 4)(x + 3) = 0$   
 $x = -2, -3$

11.  $x^2 - x - 12 = 18$   
 $x^2 - x - 30 = 0$   
 $(x - 6)(x + 5) = 0$   
 $x = 6, -5$

12.  $-4x^2 - 4x + 13 = -11$   
 $-4x^2 - 4x + 24 = 0$   
 $-(2x - 4)(2x + 6) = 0$   
 $x = 2, -3$