

# Résolution d'Équations Quadratiques (H)

Calculer les solutions des équations suivantes.

1.  $-28x^2 + 50x - 2 = 16$

7.  $-30x^2 + 3x + 24 = -39$

2.  $-56x^2 - 13x + 3 = 0$

8.  $15x^2 - 4x - 1 = 2$

3.  $-21x^2 + 23x + 15 = -5$

9.  $5x^2 + 19x - 10 = 20$

4.  $20x^2 + 42x + 17 = -1$

10.  $21x^2 + 66x = -48$

5.  $-40x^2 - 42x + 27 = -27$

11.  $-18x^2 + 13x - 1 = 1$

6.  $-32x^2 - 80x - 6 = 36$

12.  $6x^2 + 20x + 5 = -11$

## Résolution d'Équations Quadratiques (H) Réponses

Calculer les solutions des équations suivantes.

1.  $-28x^2 + 50x - 2 = 16$   
 $-28x^2 + 50x - 18 = 0$   
 $-(7x - 9)(4x - 2) = 0$   
 $x = 1 \frac{2}{7}, \frac{1}{2}$

2.  $-56x^2 - 13x + 3 = 0$   
 $-56x^2 - 13x + 3 = 0$   
 $(8x + 3)(7x - 1) = 0$   
 $x = -\frac{3}{8}, \frac{1}{7}$

3.  $-21x^2 + 23x + 15 = -5$   
 $-21x^2 + 23x + 20 = 0$   
 $(7x + 4)(3x - 5) = 0$   
 $x = -\frac{4}{7}, 1 \frac{2}{3}$

4.  $20x^2 + 42x + 17 = -1$   
 $20x^2 + 42x + 18 = 0$   
 $(5x + 3)(4x + 6) = 0$   
 $x = -\frac{3}{5}, -1 \frac{1}{2}$

5.  $-40x^2 - 42x + 27 = -27$   
 $-40x^2 - 42x + 54 = 0$   
 $(5x + 9)(8x - 6) = 0$   
 $x = -1 \frac{4}{5}, \frac{3}{4}$

6.  $-32x^2 - 80x - 6 = 36$   
 $-32x^2 - 80x - 42 = 0$   
 $(4x + 7)(8x + 6) = 0$   
 $x = -1 \frac{3}{4}, -\frac{3}{4}$

7.  $-30x^2 + 3x + 24 = -39$   
 $-30x^2 + 3x + 63 = 0$   
 $-(6x - 9)(5x + 7) = 0$   
 $x = 1 \frac{1}{2}, -1 \frac{2}{5}$

8.  $15x^2 - 4x - 1 = 2$   
 $15x^2 - 4x - 3 = 0$   
 $(3x + 1)(5x - 3) = 0$   
 $x = -\frac{1}{3}, \frac{3}{5}$

9.  $5x^2 + 19x - 10 = 20$   
 $5x^2 + 19x - 30 = 0$   
 $(5x - 6)(x + 5) = 0$   
 $x = 1 \frac{1}{5}, -5$

10.  $21x^2 + 66x = -48$   
 $21x^2 + 66x + 48 = 0$   
 $(3x + 6)(7x + 8) = 0$   
 $x = -2, -1 \frac{1}{7}$

11.  $-18x^2 + 13x - 1 = 1$   
 $-18x^2 + 13x - 2 = 0$   
 $-(2x - 1)(9x - 2) = 0$   
 $x = \frac{1}{2}, \frac{2}{9}$

12.  $6x^2 + 20x + 5 = -11$   
 $6x^2 + 20x + 16 = 0$   
 $(3x + 4)(2x + 4) = 0$   
 $x = -1 \frac{1}{3}, -2$