

# Résolution d'Équations Quadratiques (I)

Calculer les solutions des équations suivantes.

1.  $-27x^2 + 84x - 5 = 27$

7.  $-36x^2 - 17x + 8 = -27$

2.  $81x^2 - 144x + 1 = -62$

8.  $5x^2 + 8x - 2 = 2$

3.  $-8x^2 - 30x + 2 = -6$

9.  $-14x^2 - 52x + 10 = -6$

4.  $-2x^2 - 8x - 1 = 5$

10.  $25x^2 - 85x + 52 = -20$

5.  $-54x^2 + 45x + 6 = -3$

11.  $-56x^2 - 58x = -18$

6.  $6x^2 - 27x - 35 = 19$

12.  $6x^2 - 9x - 6 = 21$

## Résolution d'Équations Quadratiques (I) Réponses

Calculer les solutions des équations suivantes.

1.  $-27x^2 + 84x - 5 = 27$   
 $-27x^2 + 84x - 32 = 0$   
 $-(9x - 4)(3x - 8) = 0$   
 $x = 4/9, 2\ 2/3$

7.  $-36x^2 - 17x + 8 = -27$   
 $-36x^2 - 17x + 35 = 0$   
 $-(4x + 5)(9x - 7) = 0$   
 $x = -1\ 1/4, 7/9$

2.  $81x^2 - 144x + 1 = -62$   
 $81x^2 - 144x + 63 = 0$   
 $(9x - 9)(9x - 7) = 0$   
 $x = 1, 7/9$

8.  $5x^2 + 8x - 2 = 2$   
 $5x^2 + 8x - 4 = 0$   
 $(x + 2)(5x - 2) = 0$   
 $x = -2, 2/5$

3.  $-8x^2 - 30x + 2 = -6$   
 $-8x^2 - 30x + 8 = 0$   
 $(8x - 2)(x + 4) = 0$   
 $x = 1/4, -4$

9.  $-14x^2 - 52x + 10 = -6$   
 $-14x^2 - 52x + 16 = 0$   
 $-(7x - 2)(2x + 8) = 0$   
 $x = 2/7, -4$

4.  $-2x^2 - 8x - 1 = 5$   
 $-2x^2 - 8x - 6 = 0$   
 $-(2x + 2)(x + 3) = 0$   
 $x = -1, -3$

10.  $25x^2 - 85x + 52 = -20$   
 $25x^2 - 85x + 72 = 0$   
 $(5x - 9)(5x - 8) = 0$   
 $x = 1\ 4/5, 1\ 3/5$

5.  $-54x^2 + 45x + 6 = -3$   
 $-54x^2 + 45x + 9 = 0$   
 $(9x - 9)(6x + 1) = 0$   
 $x = 1, -1/6$

11.  $-56x^2 - 58x = -18$   
 $-56x^2 - 58x + 18 = 0$   
 $-(7x + 9)(8x - 2) = 0$   
 $x = -1\ 2/7, 1/4$

6.  $6x^2 - 27x - 35 = 19$   
 $6x^2 - 27x - 54 = 0$   
 $(x - 6)(6x + 9) = 0$   
 $x = 6, -1\ 1/2$

12.  $6x^2 - 9x - 6 = 21$   
 $6x^2 - 9x - 27 = 0$   
 $(3x - 9)(2x + 3) = 0$   
 $x = 3, -1\ 1/2$