

# Résolution d'Équations Quadratiques (C)

Calculer les solutions des équations suivantes.

$$1. \quad -45x^2 - 85x - 16 = 24$$

$$7. \quad -21x^2 + 48x - 10 = 2$$

$$2. \quad -24x^2 - 43x + 10 = -46$$

$$8. \quad -42x^2 - 117x - 19 = 62$$

$$3. \quad 28x^2 - 38x - 3 = 3$$

$$9. \quad -63x^2 + 58x - 2 = 5$$

$$4. \quad 56x^2 + 10x - 19 = 5$$

$$10. \quad 18x^2 - 8x - 3 = 7$$

$$5. \quad 18x^2 + 6x - 11 = 1$$

$$11. \quad 16x^2 - 22x + 2 = -5$$

$$6. \quad 28x^2 + 75x + 3 = -24$$

$$12. \quad 45x^2 - 58x + 2 = -14$$

## Résolution d'Équations Quadratiques (C) Réponses

Calculer les solutions des équations suivantes.

1.  $-45x^2 - 85x - 16 = 24$   
 $-45x^2 - 85x - 40 = 0$   
 $-(5x + 5)(9x + 8) = 0$   
 $x = -1, -8/9$

7.  $-21x^2 + 48x - 10 = 2$   
 $-21x^2 + 48x - 12 = 0$   
 $-(7x - 2)(3x - 6) = 0$   
 $x = 2/7, 2$

2.  $-24x^2 - 43x + 10 = -46$   
 $-24x^2 - 43x + 56 = 0$   
 $(8x - 7)(3x + 8) = 0$   
 $x = 7/8, -2 \frac{2}{3}$

8.  $-42x^2 - 117x - 19 = 62$   
 $-42x^2 - 117x - 81 = 0$   
 $-(7x + 9)(6x + 9) = 0$   
 $x = -1 \frac{2}{7}, -1 \frac{1}{2}$

3.  $28x^2 - 38x - 3 = 3$   
 $28x^2 - 38x - 6 = 0$   
 $(4x - 6)(7x + 1) = 0$   
 $x = 1 \frac{1}{2}, -\frac{1}{7}$

9.  $-63x^2 + 58x - 2 = 5$   
 $-63x^2 + 58x - 7 = 0$   
 $-(7x - 1)(9x - 7) = 0$   
 $x = \frac{1}{7}, \frac{7}{9}$

4.  $56x^2 + 10x - 19 = 5$   
 $56x^2 + 10x - 24 = 0$   
 $(7x - 4)(8x + 6) = 0$   
 $x = \frac{4}{7}, -\frac{3}{4}$

10.  $18x^2 - 8x - 3 = 7$   
 $18x^2 - 8x - 10 = 0$   
 $(2x - 2)(9x + 5) = 0$   
 $x = 1, -\frac{5}{9}$

5.  $18x^2 + 6x - 11 = 1$   
 $18x^2 + 6x - 12 = 0$   
 $(6x - 4)(3x + 3) = 0$   
 $x = \frac{2}{3}, -1$

11.  $16x^2 - 22x + 2 = -5$   
 $16x^2 - 22x + 7 = 0$   
 $(8x - 7)(2x - 1) = 0$   
 $x = \frac{7}{8}, \frac{1}{2}$

6.  $28x^2 + 75x + 3 = -24$   
 $28x^2 + 75x + 27 = 0$   
 $(4x + 9)(7x + 3) = 0$   
 $x = -2 \frac{1}{4}, -\frac{3}{7}$

12.  $45x^2 - 58x + 2 = -14$   
 $45x^2 - 58x + 16 = 0$   
 $(9x - 8)(5x - 2) = 0$   
 $x = \frac{8}{9}, \frac{2}{5}$