

# Résolution d'Équations Quadratiques (A)

Calculer les solutions des équations suivantes.

$$1. \quad -x^2 + 3x - 1 = 1$$

$$7. \quad x^2 - 12x + 23 = -12$$

$$2. \quad x^2 - x - 9 = 11$$

$$8. \quad x^2 + 11x + 3 = -27$$

$$3. \quad x^2 + 5x - 20 = 16$$

$$9. \quad -x^2 - 9x - 17 = 1$$

$$4. \quad -x^2 + 9x - 3 = 17$$

$$10. \quad x^2 - 5x - 3 = 21$$

$$5. \quad x^2 + 4x - 6 = 6$$

$$11. \quad x^2 + 3x - 20 = 8$$

$$6. \quad -x^2 - 3x + 12 = -42$$

$$12. \quad -x^2 + 15x - 51 = 3$$

## Résolution d'Équations Quadratiques (A) Réponses

Calculer les solutions des équations suivantes.

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

7.  $x^2 - 12x + 23 = -12$   
 $x^2 - 12x + 35 = 0$   
 $(x - 7)(x - 5) = 0$   
 $x = 7, 5$

2.  $x^2 - x - 9 = 11$   
 $x^2 - x - 20 = 0$   
 $(x + 4)(x - 5) = 0$   
 $x = -4, 5$

8.  $x^2 + 11x + 3 = -27$   
 $x^2 + 11x + 30 = 0$   
 $(x + 5)(x + 6) = 0$   
 $x = -5, -6$

3.  $x^2 + 5x - 20 = 16$   
 $x^2 + 5x - 36 = 0$   
 $(x + 9)(x - 4) = 0$   
 $x = -9, 4$

9.  $-x^2 - 9x - 17 = 1$   
 $-x^2 - 9x - 18 = 0$   
 $-(x + 3)(x + 6) = 0$   
 $x = -3, -6$

4.  $-x^2 + 9x - 3 = 17$   
 $-x^2 + 9x - 20 = 0$   
 $-(x - 4)(x - 5) = 0$   
 $x = 4, 5$

10.  $x^2 - 5x - 3 = 21$   
 $x^2 - 5x - 24 = 0$   
 $(x + 3)(x - 8) = 0$   
 $x = -3, 8$

5.  $x^2 + 4x - 6 = 6$   
 $x^2 + 4x - 12 = 0$   
 $(x - 2)(x + 6) = 0$   
 $x = 2, -6$

11.  $x^2 + 3x - 20 = 8$   
 $x^2 + 3x - 28 = 0$   
 $(x - 4)(x + 7) = 0$   
 $x = 4, -7$

6.  $-x^2 - 3x + 12 = -42$   
 $-x^2 - 3x + 54 = 0$   
 $(x - 6)(x + 9) = 0$   
 $x = 6, -9$

12.  $-x^2 + 15x - 51 = 3$   
 $-x^2 + 15x - 54 = 0$   
 $-(x - 6)(x - 9) = 0$   
 $x = 6, 9$

# Résolution d'Équations Quadratiques (B)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 - 7x + 5 = -1$$

$$7. \quad x^2 + x - 18 = 12$$

$$2. \quad x^2 + 8x + 4 = -8$$

$$8. \quad -x^2 - 3x = -40$$

$$3. \quad x^2 - 12 = 69$$

$$9. \quad x^2 - 5x + 3 = -3$$

$$4. \quad -x^2 + x + 6 = -6$$

$$10. \quad x^2 + 11x + 6 = -18$$

$$5. \quad -x^2 + 11x - 7 = 21$$

$$11. \quad -x^2 + x + 27 = -3$$

$$6. \quad x^2 + 18x + 13 = -68$$

$$12. \quad x^2 + 11x + 6 = -18$$

## Résolution d'Équations Quadratiques (B) Réponses

Calculer les solutions des équations suivantes.

1.  $x^2 - 7x + 5 = -1$   
 $x^2 - 7x + 6 = 0$   
 $(x - 6)(x - 1) = 0$   
 $x = 6, 1$

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

2.  $x^2 + 8x + 4 = -8$   
 $x^2 + 8x + 12 = 0$   
 $(x + 6)(x + 2) = 0$   
 $x = -6, -2$

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

3.  $x^2 - 12 = 69$   
 $x^2 - 81 = 0$   
 $(x - 9)(x + 9) = 0$   
 $x = 9, -9$

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

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

10.  $x^2 + 11x + 6 = -18$   
 $x^2 + 11x + 24 = 0$   
 $(x + 8)(x + 3) = 0$   
 $x = -8, -3$

5.  $-x^2 + 11x - 7 = 21$   
 $-x^2 + 11x - 28 = 0$   
 $(x - 7)(x - 4) = 0$   
 $x = 7, 4$

11.  $-x^2 + x + 27 = -3$   
 $-x^2 + x + 30 = 0$   
 $-(x - 6)(x + 5) = 0$   
 $x = 6, -5$

6.  $x^2 + 18x + 13 = -68$   
 $x^2 + 18x + 81 = 0$   
 $(x + 9)(x + 9) = 0$   
 $x = -9$

12.  $x^2 + 11x + 6 = -18$   
 $x^2 + 11x + 24 = 0$   
 $(x + 8)(x + 3) = 0$   
 $x = -8, -3$

# Résolution d'Équations Quadratiques (C)

Calculer les solutions des équations suivantes.

$$1. \quad -x^2 - 14x - 28 = 20$$

$$7. \quad x^2 - 13x = -42$$

$$2. \quad -x^2 - 13x - 35 = 5$$

$$8. \quad -x^2 + 7x - 11 = 1$$

$$3. \quad x^2 + 9x + 2 = -6$$

$$9. \quad -x^2 + 4x - 1 = 2$$

$$4. \quad -x^2 - 2x + 37 = -11$$

$$10. \quad x^2 - 4x - 14 = 31$$

$$5. \quad -x^2 - 4x + 31 = -14$$

$$11. \quad -x^2 + 3x + 9 = -19$$

$$6. \quad -x^2 - 4x + 2 = -3$$

$$12. \quad x^2 - 15x + 39 = -17$$

## Résolution d'Équations Quadratiques (C) Réponses

Calculer les solutions des équations suivantes.

$$\begin{aligned} 1. \quad & -x^2 - 14x - 28 = 20 \\ & -x^2 - 14x - 48 = 0 \\ & -(x + 8)(x + 6) = 0 \\ & x = -8, -6 \end{aligned}$$

$$\begin{aligned} 7. \quad & x^2 - 13x = -42 \\ & x^2 - 13x + 42 = 0 \\ & (x - 7)(x - 6) = 0 \\ & x = 7, 6 \end{aligned}$$

$$\begin{aligned} 2. \quad & -x^2 - 13x - 35 = 5 \\ & -x^2 - 13x - 40 = 0 \\ & (x + 8)(x + 5) = 0 \\ & x = -8, -5 \end{aligned}$$

$$\begin{aligned} 8. \quad & -x^2 + 7x - 11 = 1 \\ & -x^2 + 7x - 12 = 0 \\ & -(x - 3)(x - 4) = 0 \\ & x = 3, 4 \end{aligned}$$

$$\begin{aligned} 3. \quad & x^2 + 9x + 2 = -6 \\ & x^2 + 9x + 8 = 0 \\ & (x + 8)(x + 1) = 0 \\ & x = -8, -1 \end{aligned}$$

$$\begin{aligned} 9. \quad & -x^2 + 4x - 1 = 2 \\ & -x^2 + 4x - 3 = 0 \\ & -(x - 1)(x - 3) = 0 \\ & x = 1, 3 \end{aligned}$$

$$\begin{aligned} 4. \quad & -x^2 - 2x + 37 = -11 \\ & -x^2 - 2x + 48 = 0 \\ & -(x - 6)(x + 8) = 0 \\ & x = 6, -8 \end{aligned}$$

$$\begin{aligned} 10. \quad & x^2 - 4x - 14 = 31 \\ & x^2 - 4x - 45 = 0 \\ & (x - 9)(x + 5) = 0 \\ & x = 9, -5 \end{aligned}$$

$$\begin{aligned} 5. \quad & -x^2 - 4x + 31 = -14 \\ & -x^2 - 4x + 45 = 0 \\ & (x + 9)(x - 5) = 0 \\ & x = -9, 5 \end{aligned}$$

$$\begin{aligned} 11. \quad & -x^2 + 3x + 9 = -19 \\ & -x^2 + 3x + 28 = 0 \\ & -(x - 7)(x + 4) = 0 \\ & x = 7, -4 \end{aligned}$$

$$\begin{aligned} 6. \quad & -x^2 - 4x + 2 = -3 \\ & -x^2 - 4x + 5 = 0 \\ & (x + 5)(x - 1) = 0 \\ & x = -5, 1 \end{aligned}$$

$$\begin{aligned} 12. \quad & x^2 - 15x + 39 = -17 \\ & x^2 - 15x + 56 = 0 \\ & (x - 7)(x - 8) = 0 \\ & x = 7, 8 \end{aligned}$$

# Résolution d'Équations Quadratiques (D)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 + 2x - 35 = 13$$

$$7. \quad -x^2 - x + 25 = -17$$

$$2. \quad -x^2 + 13x - 8 = 32$$

$$8. \quad -x^2 + x + 69 = -3$$

$$3. \quad -x^2 - 10x - 18 = 6$$

$$9. \quad x^2 - 5x + 4 = -2$$

$$4. \quad -x^2 - 5x + 17 = -19$$

$$10. \quad x^2 - 2x - 60 = 3$$

$$5. \quad x^2 + 11x + 4 = -14$$

$$11. \quad -x^2 + 4x - 2 = 2$$

$$6. \quad -x^2 - 10x - 12 = 4$$

$$12. \quad x^2 + 11x + 7 = -11$$

## Résolution d'Équations Quadratiques (D) Réponses

Calculer les solutions des équations suivantes.

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

7.  $-x^2 - x + 25 = -17$   
 $-x^2 - x + 42 = 0$   
 $-(x + 7)(x - 6) = 0$   
 $x = -7, 6$

2.  $-x^2 + 13x - 8 = 32$   
 $-x^2 + 13x - 40 = 0$   
 $(x - 8)(x - 5) = 0$   
 $x = 8, 5$

8.  $-x^2 + x + 69 = -3$   
 $-x^2 + x + 72 = 0$   
 $-(x - 9)(x + 8) = 0$   
 $x = 9, -8$

3.  $-x^2 - 10x - 18 = 6$   
 $-x^2 - 10x - 24 = 0$   
 $(x + 4)(x + 6) = 0$   
 $x = -4, -6$

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

4.  $-x^2 - 5x + 17 = -19$   
 $-x^2 - 5x + 36 = 0$   
 $-(x - 4)(x + 9) = 0$   
 $x = 4, -9$

10.  $x^2 - 2x - 60 = 3$   
 $x^2 - 2x - 63 = 0$   
 $(x - 9)(x + 7) = 0$   
 $x = 9, -7$

5.  $x^2 + 11x + 4 = -14$   
 $x^2 + 11x + 18 = 0$   
 $(x + 9)(x + 2) = 0$   
 $x = -9, -2$

11.  $-x^2 + 4x - 2 = 2$   
 $-x^2 + 4x - 4 = 0$   
 $-(x - 2)(x - 2) = 0$   
 $x = 2$

6.  $-x^2 - 10x - 12 = 4$   
 $-x^2 - 10x - 16 = 0$   
 $(x + 8)(x + 2) = 0$   
 $x = -8, -2$

12.  $x^2 + 11x + 7 = -11$   
 $x^2 + 11x + 18 = 0$   
 $(x + 2)(x + 9) = 0$   
 $x = -2, -9$

# Résolution d'Équations Quadratiques (E)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 + 2x - 1 = 62$$

$$7. \quad -x^2 + 3x + 12 = -6$$

$$2. \quad x^2 - 3x - 13 = 5$$

$$8. \quad x^2 - 27 = 54$$

$$3. \quad x^2 - 18 = 18$$

$$9. \quad -x^2 - 4x + 10 = -2$$

$$4. \quad -x^2 - 5x - 2 = 2$$

$$10. \quad -x^2 + x + 26 = -16$$

$$5. \quad -x^2 + 4 = 0$$

$$11. \quad x^2 - 9x + 8 = -10$$

$$6. \quad x^2 + 11x + 10 = -8$$

$$12. \quad x^2 + 2x - 8 = 55$$

## Résolution d'Équations Quadratiques (E) Réponses

Calculer les solutions des équations suivantes.

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

$x^2 + 2x - 63 = 0$

$(x + 9)(x - 7) = 0$

$x = -9, 7$

7.  $-x^2 + 3x + 12 = -6$

$-x^2 + 3x + 18 = 0$

$-(x - 6)(x + 3) = 0$

$x = 6, -3$

2.  $x^2 - 3x - 13 = 5$

$x^2 - 3x - 18 = 0$

$(x - 6)(x + 3) = 0$

$x = 6, -3$

8.  $x^2 - 27 = 54$

$x^2 - 81 = 0$

$(x - 9)(x + 9) = 0$

$x = 9, -9$

3.  $x^2 - 18 = 18$

$x^2 - 36 = 0$

$(x - 6)(x + 6) = 0$

$x = 6, -6$

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

$-x^2 - 4x + 12 = 0$

$-(x - 2)(x + 6) = 0$

$x = 2, -6$

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

$-x^2 - 5x - 4 = 0$

$-(x + 1)(x + 4) = 0$

$x = -1, -4$

10.  $-x^2 + x + 26 = -16$

$-x^2 + x + 42 = 0$

$-(x - 7)(x + 6) = 0$

$x = 7, -6$

5.  $-x^2 + 4 = 0$

$-x^2 + 4 = 0$

$(x - 2)(x + 2) = 0$

$x = 2, -2$

11.  $x^2 - 9x + 8 = -10$

$x^2 - 9x + 18 = 0$

$(x - 3)(x - 6) = 0$

$x = 3, 6$

6.  $x^2 + 11x + 10 = -8$

$x^2 + 11x + 18 = 0$

$(x + 2)(x + 9) = 0$

$x = -2, -9$

12.  $x^2 + 2x - 8 = 55$

$x^2 + 2x - 63 = 0$

$(x + 9)(x - 7) = 0$

$x = -9, 7$

# Résolution d'Équations Quadratiques (F)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 - 7x - 15 = 3$$

$$7. \quad x^2 + 10x + 14 = -7$$

$$2. \quad -x^2 - 3x - 1 = 1$$

$$8. \quad -x^2 - x + 42 = -30$$

$$3. \quad x^2 + 4x - 20 = 1$$

$$9. \quad -x^2 + 10x - 14 = 2$$

$$4. \quad x^2 - 9x + 3 = -15$$

$$10. \quad x^2 + 10x + 8 = -1$$

$$5. \quad x^2 + 2x + 1 = 0$$

$$11. \quad x^2 + 12x + 18 = -17$$

$$6. \quad -x^2 + 7x - 7 = 3$$

$$12. \quad x^2 + x - 15 = 41$$

## Résolution d'Équations Quadratiques (F) Réponses

Calculer les solutions des équations suivantes.

$$1. \quad x^2 - 7x - 15 = 3$$

$$x^2 - 7x - 18 = 0$$

$$(x - 9)(x + 2) = 0$$

$$x = 9, -2$$

$$7. \quad x^2 + 10x + 14 = -7$$

$$x^2 + 10x + 21 = 0$$

$$(x + 3)(x + 7) = 0$$

$$x = -3, -7$$

$$2. \quad -x^2 - 3x - 1 = 1$$

$$-x^2 - 3x - 2 = 0$$

$$(x + 1)(x + 2) = 0$$

$$x = -1, -2$$

$$8. \quad -x^2 - x + 42 = -30$$

$$-x^2 - x + 72 = 0$$

$$-(x - 8)(x + 9) = 0$$

$$x = 8, -9$$

$$3. \quad x^2 + 4x - 20 = 1$$

$$x^2 + 4x - 21 = 0$$

$$(x - 3)(x + 7) = 0$$

$$x = 3, -7$$

$$9. \quad -x^2 + 10x - 14 = 2$$

$$-x^2 + 10x - 16 = 0$$

$$-(x - 8)(x - 2) = 0$$

$$x = 8, 2$$

$$4. \quad x^2 - 9x + 3 = -15$$

$$x^2 - 9x + 18 = 0$$

$$(x - 6)(x - 3) = 0$$

$$x = 6, 3$$

$$10. \quad x^2 + 10x + 8 = -1$$

$$x^2 + 10x + 9 = 0$$

$$(x + 9)(x + 1) = 0$$

$$x = -9, -1$$

$$5. \quad x^2 + 2x + 1 = 0$$

$$x^2 + 2x + 1 = 0$$

$$(x + 1)(x + 1) = 0$$

$$x = -1$$

$$11. \quad x^2 + 12x + 18 = -17$$

$$x^2 + 12x + 35 = 0$$

$$(x + 5)(x + 7) = 0$$

$$x = -5, -7$$

$$6. \quad -x^2 + 7x - 7 = 3$$

$$-x^2 + 7x - 10 = 0$$

$$(x - 5)(x - 2) = 0$$

$$x = 5, 2$$

$$12. \quad x^2 + x - 15 = 41$$

$$x^2 + x - 56 = 0$$

$$(x + 8)(x - 7) = 0$$

$$x = -8, 7$$

# Résolution d'Équations Quadratiques (G)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 - 7x - 5 = 3$$

$$7. \quad x^2 + 4x - 18 = 14$$

$$2. \quad -x^2 - 5x + 13 = -11$$

$$8. \quad x^2 - 6 = 3$$

$$3. \quad -x^2 + 10x - 5 = 19$$

$$9. \quad x^2 - 2x - 4 = 4$$

$$4. \quad x^2 - 4x - 2 = 10$$

$$10. \quad -x^2 - 8x - 13 = 2$$

$$5. \quad x^2 - 6x - 3 = 4$$

$$11. \quad x^2 - 7x + 10 = -2$$

$$6. \quad x^2 - 4x - 16 = 5$$

$$12. \quad -x^2 - 5x + 5 = -1$$

## Résolution d'Équations Quadratiques (G) Réponses

Calculer les solutions des équations suivantes.

$$\begin{aligned} 1. \quad & x^2 - 7x - 5 = 3 \\ & x^2 - 7x - 8 = 0 \\ & (x + 1)(x - 8) = 0 \\ & x = -1, 8 \end{aligned}$$

$$\begin{aligned} 7. \quad & x^2 + 4x - 18 = 14 \\ & x^2 + 4x - 32 = 0 \\ & (x - 4)(x + 8) = 0 \\ & x = 4, -8 \end{aligned}$$

$$\begin{aligned} 2. \quad & -x^2 - 5x + 13 = -11 \\ & -x^2 - 5x + 24 = 0 \\ & (x - 3)(x + 8) = 0 \\ & x = 3, -8 \end{aligned}$$

$$\begin{aligned} 8. \quad & x^2 - 6 = 3 \\ & x^2 - 9 = 0 \\ & (x - 3)(x + 3) = 0 \\ & x = 3, -3 \end{aligned}$$

$$\begin{aligned} 3. \quad & -x^2 + 10x - 5 = 19 \\ & -x^2 + 10x - 24 = 0 \\ & (x - 6)(x - 4) = 0 \\ & x = 6, 4 \end{aligned}$$

$$\begin{aligned} 9. \quad & x^2 - 2x - 4 = 4 \\ & x^2 - 2x - 8 = 0 \\ & (x + 2)(x - 4) = 0 \\ & x = -2, 4 \end{aligned}$$

$$\begin{aligned} 4. \quad & x^2 - 4x - 2 = 10 \\ & x^2 - 4x - 12 = 0 \\ & (x + 2)(x - 6) = 0 \\ & x = -2, 6 \end{aligned}$$

$$\begin{aligned} 10. \quad & -x^2 - 8x - 13 = 2 \\ & -x^2 - 8x - 15 = 0 \\ & -(x + 5)(x + 3) = 0 \\ & x = -5, -3 \end{aligned}$$

$$\begin{aligned} 5. \quad & x^2 - 6x - 3 = 4 \\ & x^2 - 6x - 7 = 0 \\ & (x + 1)(x - 7) = 0 \\ & x = -1, 7 \end{aligned}$$

$$\begin{aligned} 11. \quad & x^2 - 7x + 10 = -2 \\ & x^2 - 7x + 12 = 0 \\ & (x - 4)(x - 3) = 0 \\ & x = 4, 3 \end{aligned}$$

$$\begin{aligned} 6. \quad & x^2 - 4x - 16 = 5 \\ & x^2 - 4x - 21 = 0 \\ & (x - 7)(x + 3) = 0 \\ & x = 7, -3 \end{aligned}$$

$$\begin{aligned} 12. \quad & -x^2 - 5x + 5 = -1 \\ & -x^2 - 5x + 6 = 0 \\ & -(x - 1)(x + 6) = 0 \\ & x = 1, -6 \end{aligned}$$

# Résolution d'Équations Quadratiques (H)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 + 2x - 13 = 2$$

$$7. \quad x^2 + 4x + 2 = -1$$

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

$$8. \quad x^2 - 7x + 6 = -6$$

$$3. \quad x^2 - 65 = 16$$

$$9. \quad -x^2 - 2x + 13 = -22$$

$$4. \quad -x^2 + 5x + 15 = -9$$

$$10. \quad x^2 - 12x + 18 = -9$$

$$5. \quad x^2 + 2x - 5 = 3$$

$$11. \quad -x^2 + 5x = -14$$

$$6. \quad x^2 + x - 6 = 6$$

$$12. \quad x^2 - 13x + 29 = -11$$

## Résolution d'Équations Quadratiques (H) Réponses

Calculer les solutions des équations suivantes.

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

$$7. \quad x^2 + 4x + 2 = -1$$
$$x^2 + 4x + 3 = 0$$
$$(x + 3)(x + 1) = 0$$
$$x = -3, -1$$

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

$$8. \quad x^2 - 7x + 6 = -6$$
$$x^2 - 7x + 12 = 0$$
$$(x - 4)(x - 3) = 0$$
$$x = 4, 3$$

$$3. \quad x^2 - 65 = 16$$
$$x^2 - 81 = 0$$
$$(x - 9)(x + 9) = 0$$
$$x = 9, -9$$

$$9. \quad -x^2 - 2x + 13 = -22$$
$$-x^2 - 2x + 35 = 0$$
$$-(x + 7)(x - 5) = 0$$
$$x = -7, 5$$

$$4. \quad -x^2 + 5x + 15 = -9$$
$$-x^2 + 5x + 24 = 0$$
$$-(x + 3)(x - 8) = 0$$
$$x = -3, 8$$

$$10. \quad x^2 - 12x + 18 = -9$$
$$x^2 - 12x + 27 = 0$$
$$(x - 9)(x - 3) = 0$$
$$x = 9, 3$$

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

$$11. \quad -x^2 + 5x = -14$$
$$-x^2 + 5x + 14 = 0$$
$$-(x + 2)(x - 7) = 0$$
$$x = -2, 7$$

$$6. \quad x^2 + x - 6 = 6$$
$$x^2 + x - 12 = 0$$
$$(x - 3)(x + 4) = 0$$
$$x = 3, -4$$

$$12. \quad x^2 - 13x + 29 = -11$$
$$x^2 - 13x + 40 = 0$$
$$(x - 8)(x - 5) = 0$$
$$x = 8, 5$$

# Résolution d'Équations Quadratiques (I)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 - 16x + 52 = -11$$

$$7. \quad x^2 + 4x - 11 = 21$$

$$2. \quad x^2 + 8x + 6 = -1$$

$$8. \quad x^2 - 10x + 1 = -15$$

$$3. \quad x^2 - 2x - 36 = 12$$

$$9. \quad x^2 - x - 2 = 28$$

$$4. \quad x^2 - 10x + 18 = -7$$

$$10. \quad -x^2 + x + 2 = 0$$

$$5. \quad -x^2 + 7x + 8 = -10$$

$$11. \quad -x^2 - 2x + 20 = -28$$

$$6. \quad -x^2 - 13x - 23 = 19$$

$$12. \quad -x^2 + 5x + 6 = 0$$

## Résolution d'Équations Quadratiques (I) Réponses

Calculer les solutions des équations suivantes.

1.  $x^2 - 16x + 52 = -11$   
 $x^2 - 16x + 63 = 0$   
 $(x - 7)(x - 9) = 0$   
 $x = 7, 9$

7.  $x^2 + 4x - 11 = 21$   
 $x^2 + 4x - 32 = 0$   
 $(x + 8)(x - 4) = 0$   
 $x = -8, 4$

2.  $x^2 + 8x + 6 = -1$   
 $x^2 + 8x + 7 = 0$   
 $(x + 1)(x + 7) = 0$   
 $x = -1, -7$

8.  $x^2 - 10x + 1 = -15$   
 $x^2 - 10x + 16 = 0$   
 $(x - 8)(x - 2) = 0$   
 $x = 8, 2$

3.  $x^2 - 2x - 36 = 12$   
 $x^2 - 2x - 48 = 0$   
 $(x + 6)(x - 8) = 0$   
 $x = -6, 8$

9.  $x^2 - x - 2 = 28$   
 $x^2 - x - 30 = 0$   
 $(x + 5)(x - 6) = 0$   
 $x = -5, 6$

4.  $x^2 - 10x + 18 = -7$   
 $x^2 - 10x + 25 = 0$   
 $(x - 5)(x - 5) = 0$   
 $x = 5$

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

5.  $-x^2 + 7x + 8 = -10$   
 $-x^2 + 7x + 18 = 0$   
 $(x - 9)(x + 2) = 0$   
 $x = 9, -2$

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

6.  $-x^2 - 13x - 23 = 19$   
 $-x^2 - 13x - 42 = 0$   
 $(x + 6)(x + 7) = 0$   
 $x = -6, -7$

12.  $-x^2 + 5x + 6 = 0$   
 $-x^2 + 5x + 6 = 0$   
 $-(x - 6)(x + 1) = 0$   
 $x = 6, -1$

# Résolution d'Équations Quadratiques (J)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 - 8x - 3 = 6$$

$$7. \quad -x^2 + 11x - 16 = 2$$

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

$$8. \quad x^2 - 2x - 23 = 12$$

$$3. \quad -x^2 + 14x - 28 = 20$$

$$9. \quad -x^2 - 12x - 4 = 23$$

$$4. \quad -x^2 + 15x - 40 = 14$$

$$10. \quad x^2 - 13 = 68$$

$$5. \quad x^2 - 5 = 4$$

$$11. \quad -x^2 - 9x - 12 = 6$$

$$6. \quad x^2 + 10x + 10 = -6$$

$$12. \quad x^2 + 2x - 13 = 2$$

## Résolution d'Équations Quadratiques (J) Réponses

Calculer les solutions des équations suivantes.

$$\begin{aligned} 1. \quad & x^2 - 8x - 3 = 6 \\ & x^2 - 8x - 9 = 0 \\ & (x + 1)(x - 9) = 0 \\ & x = -1, 9 \end{aligned}$$

$$\begin{aligned} 2. \quad & x^2 + 6x + 2 = -3 \\ & x^2 + 6x + 5 = 0 \\ & (x + 1)(x + 5) = 0 \\ & x = -1, -5 \end{aligned}$$

$$\begin{aligned} 3. \quad & -x^2 + 14x - 28 = 20 \\ & -x^2 + 14x - 48 = 0 \\ & (x - 6)(x - 8) = 0 \\ & x = 6, 8 \end{aligned}$$

$$\begin{aligned} 4. \quad & -x^2 + 15x - 40 = 14 \\ & -x^2 + 15x - 54 = 0 \\ & -(x - 9)(x - 6) = 0 \\ & x = 9, 6 \end{aligned}$$

$$\begin{aligned} 5. \quad & x^2 - 5 = 4 \\ & x^2 - 9 = 0 \\ & (x + 3)(x - 3) = 0 \\ & x = -3, 3 \end{aligned}$$

$$\begin{aligned} 6. \quad & x^2 + 10x + 10 = -6 \\ & x^2 + 10x + 16 = 0 \\ & (x + 8)(x + 2) = 0 \\ & x = -8, -2 \end{aligned}$$

$$\begin{aligned} 7. \quad & -x^2 + 11x - 16 = 2 \\ & -x^2 + 11x - 18 = 0 \\ & -(x - 2)(x - 9) = 0 \\ & x = 2, 9 \end{aligned}$$

$$\begin{aligned} 8. \quad & x^2 - 2x - 23 = 12 \\ & x^2 - 2x - 35 = 0 \\ & (x - 7)(x + 5) = 0 \\ & x = 7, -5 \end{aligned}$$

$$\begin{aligned} 9. \quad & -x^2 - 12x - 4 = 23 \\ & -x^2 - 12x - 27 = 0 \\ & -(x + 9)(x + 3) = 0 \\ & x = -9, -3 \end{aligned}$$

$$\begin{aligned} 10. \quad & x^2 - 13 = 68 \\ & x^2 - 81 = 0 \\ & (x + 9)(x - 9) = 0 \\ & x = -9, 9 \end{aligned}$$

$$\begin{aligned} 11. \quad & -x^2 - 9x - 12 = 6 \\ & -x^2 - 9x - 18 = 0 \\ & -(x + 6)(x + 3) = 0 \\ & x = -6, -3 \end{aligned}$$

$$\begin{aligned} 12. \quad & x^2 + 2x - 13 = 2 \\ & x^2 + 2x - 15 = 0 \\ & (x - 3)(x + 5) = 0 \\ & x = 3, -5 \end{aligned}$$