

Résolution d'Équations Quadratiques (A)

Calculer les solutions des équations suivantes.

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

$$7. \quad 2x^2 + 10x + 4 = -8$$

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

$$8. \quad 2x^2 - 8x - 57 = 7$$

$$3. \quad 4x^2 - 5 = 11$$

$$9. \quad 2x^2 - 7x + 4 = -2$$

$$4. \quad x^2 - 9x + 6 = -2$$

$$10. \quad 4x^2 - 22x + 17 = -7$$

$$5. \quad 4x^2 + 2x - 1 = 1$$

$$11. \quad 4x^2 - 30x + 30 = -24$$

$$6. \quad x^2 - x - 43 = 13$$

$$12. \quad 2x^2 + 14x + 13 = -7$$

Résolution d'Équations Quadratiques (A) Réponses

Calculer les solutions des équations suivantes.

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

$$2x^2 - 4x - 6 = 0$$

$$(2x + 2)(x - 3) = 0$$

$$x = -1, 3$$

$$7. \quad 2x^2 + 10x + 4 = -8$$

$$2x^2 + 10x + 12 = 0$$

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

$$x = -2, -3$$

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

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

$$(x - 1)(x + 5) = 0$$

$$x = 1, -5$$

$$8. \quad 2x^2 - 8x - 57 = 7$$

$$2x^2 - 8x - 64 = 0$$

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

$$x = -4, 8$$

$$3. \quad 4x^2 - 5 = 11$$

$$4x^2 - 16 = 0$$

$$(2x - 4)(2x + 4) = 0$$

$$x = 2, -2$$

$$9. \quad 2x^2 - 7x + 4 = -2$$

$$2x^2 - 7x + 6 = 0$$

$$(2x - 3)(x - 2) = 0$$

$$x = 1\frac{1}{2}, 2$$

$$4. \quad x^2 - 9x + 6 = -2$$

$$x^2 - 9x + 8 = 0$$

$$(x - 1)(x - 8) = 0$$

$$x = 1, 8$$

$$10. \quad 4x^2 - 22x + 17 = -7$$

$$4x^2 - 22x + 24 = 0$$

$$(2x - 8)(2x - 3) = 0$$

$$x = 4, 1\frac{1}{2}$$

$$5. \quad 4x^2 + 2x - 1 = 1$$

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

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

$$x = 1/2, -1$$

$$11. \quad 4x^2 - 30x + 30 = -24$$

$$4x^2 - 30x + 54 = 0$$

$$(2x - 9)(2x - 6) = 0$$

$$x = 4\frac{1}{2}, 3$$

$$6. \quad x^2 - x - 43 = 13$$

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

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

$$x = 8, -7$$

$$12. \quad 2x^2 + 14x + 13 = -7$$

$$2x^2 + 14x + 20 = 0$$

$$(2x + 4)(x + 5) = 0$$

$$x = -2, -5$$

Résolution d'Équations Quadratiques (B)

Calculer les solutions des équations suivantes.

$$1. \quad 2x^2 + 24x + 28 = -26$$

$$7. \quad x^2 - 12x + 7 = -20$$

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

$$8. \quad 2x^2 + 23x + 17 = -39$$

$$3. \quad x^2 + 13x + 8 = -32$$

$$9. \quad 4x^2 - 2x - 54 = 2$$

$$4. \quad x^2 + 12x + 10 = -17$$

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

$$5. \quad 2x^2 + 23x + 21 = -42$$

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

$$6. \quad 2x^2 - 15x + 20 = -8$$

$$12. \quad x^2 + 6x - 4 = 3$$

Résolution d'Équations Quadratiques (B) Réponses

Calculer les solutions des équations suivantes.

1. $2x^2 + 24x + 28 = -26$
 $2x^2 + 24x + 54 = 0$
 $(x + 9)(2x + 6) = 0$
 $x = -9, -3$

7. $x^2 - 12x + 7 = -20$
 $x^2 - 12x + 27 = 0$
 $(x - 9)(x - 3) = 0$
 $x = 9, 3$

2. $2x^2 + 10x = -8$
 $2x^2 + 10x + 8 = 0$
 $(2x + 8)(x + 1) = 0$
 $x = -4, -1$

8. $2x^2 + 23x + 17 = -39$
 $2x^2 + 23x + 56 = 0$
 $(2x + 7)(x + 8) = 0$
 $x = -3 \frac{1}{2}, -8$

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

9. $4x^2 - 2x - 54 = 2$
 $4x^2 - 2x - 56 = 0$
 $(2x + 7)(2x - 8) = 0$
 $x = -3 \frac{1}{2}, 4$

4. $x^2 + 12x + 10 = -17$
 $x^2 + 12x + 27 = 0$
 $(x + 3)(x + 9) = 0$
 $x = -3, -9$

10. $4x^2 + 14x - 4 = 4$
 $4x^2 + 14x - 8 = 0$
 $(2x - 1)(2x + 8) = 0$
 $x = \frac{1}{2}, -4$

5. $2x^2 + 23x + 21 = -42$
 $2x^2 + 23x + 63 = 0$
 $(x + 7)(2x + 9) = 0$
 $x = -7, -4 \frac{1}{2}$

11. $x^2 + 7x + 11 = -1$
 $x^2 + 7x + 12 = 0$
 $(x + 3)(x + 4) = 0$
 $x = -3, -4$

6. $2x^2 - 15x + 20 = -8$
 $2x^2 - 15x + 28 = 0$
 $(x - 4)(2x - 7) = 0$
 $x = 4, 3 \frac{1}{2}$

12. $x^2 + 6x - 4 = 3$
 $x^2 + 6x - 7 = 0$
 $(x - 1)(x + 7) = 0$
 $x = 1, -7$

Résolution d'Équations Quadratiques (C)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 - x - 23 = 19$$

$$7. \quad 2x^2 + 6x - 29 = 7$$

$$2. \quad 4x^2 - 14x = -12$$

$$8. \quad 2x^2 + 4x - 43 = 5$$

$$3. \quad x^2 - 53 = 11$$

$$9. \quad 2x^2 - 14x - 14 = 22$$

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

$$10. \quad x^2 - 12x + 22 = -13$$

$$5. \quad 4x^2 - 10x + 1 = -5$$

$$11. \quad 2x^2 - 6x - 17 = 3$$

$$6. \quad x^2 + 10x + 13 = -3$$

$$12. \quad 4x^2 - 24x + 7 = -20$$

Résolution d'Équations Quadratiques (C) Réponses

Calculer les solutions des équations suivantes.

$$\begin{aligned}1. \quad & x^2 - x - 23 = 19 \\& x^2 - x - 42 = 0 \\& (x + 6)(x - 7) = 0 \\& x = -6, 7\end{aligned}$$

$$\begin{aligned}2. \quad & 4x^2 - 14x = -12 \\& 4x^2 - 14x + 12 = 0 \\& (2x - 3)(2x - 4) = 0 \\& x = 1\frac{1}{2}, 2\end{aligned}$$

$$\begin{aligned}3. \quad & x^2 - 53 = 11 \\& x^2 - 64 = 0 \\& (x + 8)(x - 8) = 0 \\& x = -8, 8\end{aligned}$$

$$\begin{aligned}4. \quad & 4x^2 - 4x - 5 = 10 \\& 4x^2 - 4x - 15 = 0 \\& (2x - 5)(2x + 3) = 0 \\& x = 2\frac{1}{2}, -1\frac{1}{2}\end{aligned}$$

$$\begin{aligned}5. \quad & 4x^2 - 10x + 1 = -5 \\& 4x^2 - 10x + 6 = 0 \\& (2x - 3)(2x - 2) = 0 \\& x = 1\frac{1}{2}, 1\end{aligned}$$

$$\begin{aligned}6. \quad & x^2 + 10x + 13 = -3 \\& x^2 + 10x + 16 = 0 \\& (x + 2)(x + 8) = 0 \\& x = -2, -8\end{aligned}$$

$$\begin{aligned}7. \quad & 2x^2 + 6x - 29 = 7 \\& 2x^2 + 6x - 36 = 0 \\& (2x - 6)(x + 6) = 0 \\& x = 3, -6\end{aligned}$$

$$\begin{aligned}8. \quad & 2x^2 + 4x - 43 = 5 \\& 2x^2 + 4x - 48 = 0 \\& (x + 6)(2x - 8) = 0 \\& x = -6, 4\end{aligned}$$

$$\begin{aligned}9. \quad & 2x^2 - 14x - 14 = 22 \\& 2x^2 - 14x - 36 = 0 \\& (2x + 4)(x - 9) = 0 \\& x = -2, 9\end{aligned}$$

$$\begin{aligned}10. \quad & x^2 - 12x + 22 = -13 \\& x^2 - 12x + 35 = 0 \\& (x - 7)(x - 5) = 0 \\& x = 7, 5\end{aligned}$$

$$\begin{aligned}11. \quad & 2x^2 - 6x - 17 = 3 \\& 2x^2 - 6x - 20 = 0 \\& (x - 5)(2x + 4) = 0 \\& x = 5, -2\end{aligned}$$

$$\begin{aligned}12. \quad & 4x^2 - 24x + 7 = -20 \\& 4x^2 - 24x + 27 = 0 \\& (2x - 9)(2x - 3) = 0 \\& x = 4\frac{1}{2}, 1\frac{1}{2}\end{aligned}$$

Résolution d'Équations Quadratiques (D)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 + 14x + 2 = -43$$

$$7. \quad 4x^2 - 1 = 0$$

$$2. \quad 4x^2 + 26x + 23 = -17$$

$$8. \quad x^2 + 5x + 3 = -3$$

$$3. \quad 2x^2 - 12x - 44 = 10$$

$$9. \quad 2x^2 - 9x + 6 = -1$$

$$4. \quad 2x^2 - 11x + 2 = -13$$

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

$$5. \quad 4x^2 - 12x - 4 = 3$$

$$11. \quad 4x^2 - 14x - 6 = 12$$

$$6. \quad 2x^2 + 7x - 1 = 3$$

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

Résolution d'Équations Quadratiques (D) Réponses

Calculer les solutions des équations suivantes.

1. $x^2 + 14x + 2 = -43$
 $x^2 + 14x + 45 = 0$
 $(x + 9)(x + 5) = 0$
 $x = -9, -5$

7. $4x^2 - 1 = 0$
 $4x^2 - 1 = 0$
 $(2x + 1)(2x - 1) = 0$
 $x = -1/2, 1/2$

2. $4x^2 + 26x + 23 = -17$
 $4x^2 + 26x + 40 = 0$
 $(2x + 8)(2x + 5) = 0$
 $x = -4, -2 1/2$

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

3. $2x^2 - 12x - 44 = 10$
 $2x^2 - 12x - 54 = 0$
 $(x - 9)(2x + 6) = 0$
 $x = 9, -3$

9. $2x^2 - 9x + 6 = -1$
 $2x^2 - 9x + 7 = 0$
 $(x - 1)(2x - 7) = 0$
 $x = 1, 3 1/2$

4. $2x^2 - 11x + 2 = -13$
 $2x^2 - 11x + 15 = 0$
 $(2x - 5)(x - 3) = 0$
 $x = 2 1/2, 3$

10. $x^2 + 4x - 19 = 2$
 $x^2 + 4x - 21 = 0$
 $(x + 7)(x - 3) = 0$
 $x = -7, 3$

5. $4x^2 - 12x - 4 = 3$
 $4x^2 - 12x - 7 = 0$
 $(2x - 7)(2x + 1) = 0$
 $x = 3 1/2, -1/2$

11. $4x^2 - 14x - 6 = 12$
 $4x^2 - 14x - 18 = 0$
 $(2x + 2)(2x - 9) = 0$
 $x = -1, 4 1/2$

6. $2x^2 + 7x - 1 = 3$
 $2x^2 + 7x - 4 = 0$
 $(x + 4)(2x - 1) = 0$
 $x = -4, 1/2$

12. $4x^2 - 6x = -2$
 $4x^2 - 6x + 2 = 0$
 $(2x - 2)(2x - 1) = 0$
 $x = 1, 1/2$

Résolution d'Équations Quadratiques (E)

Calculer les solutions des équations suivantes.

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

$$7. \quad x^2 - 4x - 11 = 10$$

$$2. \quad 4x^2 - 10x + 3 = -3$$

$$8. \quad 4x^2 + 22x + 5 = -13$$

$$3. \quad 2x^2 - 2x - 35 = 5$$

$$9. \quad x^2 + 10x + 7 = -9$$

$$4. \quad 2x^2 + 20x + 28 = -14$$

$$10. \quad 2x^2 + 13x + 15 = -6$$

$$5. \quad 2x^2 + 7x - 5 = 4$$

$$11. \quad x^2 - 3x + 1 = -1$$

$$6. \quad 4x^2 - 14x + 9 = -1$$

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

Résolution d'Équations Quadratiques (E) Réponses

Calculer les solutions des équations suivantes.

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

7. $x^2 - 4x - 11 = 10$
 $x^2 - 4x - 21 = 0$
 $(x + 3)(x - 7) = 0$
 $x = -3, 7$

2. $4x^2 - 10x + 3 = -3$
 $4x^2 - 10x + 6 = 0$
 $(2x - 2)(2x - 3) = 0$
 $x = 1, 1\frac{1}{2}$

8. $4x^2 + 22x + 5 = -13$
 $4x^2 + 22x + 18 = 0$
 $(2x + 2)(2x + 9) = 0$
 $x = -1, -4\frac{1}{2}$

3. $2x^2 - 2x - 35 = 5$
 $2x^2 - 2x - 40 = 0$
 $(2x + 8)(x - 5) = 0$
 $x = -4, 5$

9. $x^2 + 10x + 7 = -9$
 $x^2 + 10x + 16 = 0$
 $(x + 8)(x + 2) = 0$
 $x = -8, -2$

4. $2x^2 + 20x + 28 = -14$
 $2x^2 + 20x + 42 = 0$
 $(x + 7)(2x + 6) = 0$
 $x = -7, -3$

10. $2x^2 + 13x + 15 = -6$
 $2x^2 + 13x + 21 = 0$
 $(x + 3)(2x + 7) = 0$
 $x = -3, -3\frac{1}{2}$

5. $2x^2 + 7x - 5 = 4$
 $2x^2 + 7x - 9 = 0$
 $(x - 1)(2x + 9) = 0$
 $x = 1, -4\frac{1}{2}$

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

6. $4x^2 - 14x + 9 = -1$
 $4x^2 - 14x + 10 = 0$
 $(2x - 2)(2x - 5) = 0$
 $x = 1, 2\frac{1}{2}$

12. $x^2 + 11x + 11 = -13$
 $x^2 + 11x + 24 = 0$
 $(x + 8)(x + 3) = 0$
 $x = -8, -3$

Résolution d'Équations Quadratiques (F)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 + 8x - 5 = 4$$

$$7. \quad 4x^2 + 6x - 30 = 10$$

$$2. \quad 2x^2 - 13x + 3 = -15$$

$$8. \quad 2x^2 - 8x + 5 = -1$$

$$3. \quad 2x^2 + 14x + 24 = 0$$

$$9. \quad x^2 - 7x + 10 = -2$$

$$4. \quad 4x^2 + 4x - 2 = 33$$

$$10. \quad x^2 + 5x - 13 = 23$$

$$5. \quad 2x^2 - 8x + 3 = -3$$

$$11. \quad 2x^2 - 14x + 1 = -23$$

$$6. \quad x^2 - 2x - 1 = 62$$

$$12. \quad x^2 - 2x - 3 = 5$$

Résolution d'Équations Quadratiques (F) Réponses

Calculer les solutions des équations suivantes.

$$1. \quad x^2 + 8x - 5 = 4$$

$$x^2 + 8x - 9 = 0$$

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

$$x = -9, 1$$

$$7. \quad 4x^2 + 6x - 30 = 10$$

$$4x^2 + 6x - 40 = 0$$

$$(2x + 8)(2x - 5) = 0$$

$$x = -4, 2 \frac{1}{2}$$

$$2. \quad 2x^2 - 13x + 3 = -15$$

$$2x^2 - 13x + 18 = 0$$

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

$$x = 4 \frac{1}{2}, 2$$

$$8. \quad 2x^2 - 8x + 5 = -1$$

$$2x^2 - 8x + 6 = 0$$

$$(2x - 6)(x - 1) = 0$$

$$x = 3, 1$$

$$3. \quad 2x^2 + 14x + 24 = 0$$

$$2x^2 + 14x + 24 = 0$$

$$(2x + 8)(x + 3) = 0$$

$$x = -4, -3$$

$$9. \quad x^2 - 7x + 10 = -2$$

$$x^2 - 7x + 12 = 0$$

$$(x - 4)(x - 3) = 0$$

$$x = 4, 3$$

$$4. \quad 4x^2 + 4x - 2 = 33$$

$$4x^2 + 4x - 35 = 0$$

$$(2x + 7)(2x - 5) = 0$$

$$x = -3 \frac{1}{2}, 2 \frac{1}{2}$$

$$10. \quad x^2 + 5x - 13 = 23$$

$$x^2 + 5x - 36 = 0$$

$$(x - 4)(x + 9) = 0$$

$$x = 4, -9$$

$$5. \quad 2x^2 - 8x + 3 = -3$$

$$2x^2 - 8x + 6 = 0$$

$$(2x - 2)(x - 3) = 0$$

$$x = 1, 3$$

$$11. \quad 2x^2 - 14x + 1 = -23$$

$$2x^2 - 14x + 24 = 0$$

$$(x - 4)(2x - 6) = 0$$

$$x = 4, 3$$

$$6. \quad x^2 - 2x - 1 = 62$$

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

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

$$x = -7, 9$$

$$12. \quad x^2 - 2x - 3 = 5$$

$$x^2 - 2x - 8 = 0$$

$$(x - 4)(x + 2) = 0$$

$$x = 4, -2$$

Résolution d'Équations Quadratiques (G)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 - 5x + 4 = -2$$

$$7. \quad 2x^2 + 19x + 24 = -21$$

$$2. \quad 2x^2 - 12x + 5 = -13$$

$$8. \quad 2x^2 - 10x - 37 = 11$$

$$3. \quad x^2 - x - 36 = 6$$

$$9. \quad 2x^2 - 5 = 13$$

$$4. \quad x^2 - 9x = -8$$

$$10. \quad 2x^2 - 17x + 19 = -16$$

$$5. \quad 2x^2 + 15x - 10 = 17$$

$$11. \quad 4x^2 - 4x - 14 = 10$$

$$6. \quad 2x^2 - 10x - 9 = 39$$

$$12. \quad 2x^2 + 26x + 37 = -35$$

Résolution d'Équations Quadratiques (G) Réponses

Calculer les solutions des équations suivantes.

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

7. $2x^2 + 19x + 24 = -21$
 $2x^2 + 19x + 45 = 0$
 $(x + 5)(2x + 9) = 0$
 $x = -5, -4 \frac{1}{2}$

2. $2x^2 - 12x + 5 = -13$
 $2x^2 - 12x + 18 = 0$
 $(2x - 6)(x - 3) = 0$
 $x = 3$

8. $2x^2 - 10x - 37 = 11$
 $2x^2 - 10x - 48 = 0$
 $(2x + 6)(x - 8) = 0$
 $x = -3, 8$

3. $x^2 - x - 36 = 6$
 $x^2 - x - 42 = 0$
 $(x - 7)(x + 6) = 0$
 $x = 7, -6$

9. $2x^2 - 5 = 13$
 $2x^2 - 18 = 0$
 $(2x - 6)(x + 3) = 0$
 $x = 3, -3$

4. $x^2 - 9x = -8$
 $x^2 - 9x + 8 = 0$
 $(x - 1)(x - 8) = 0$
 $x = 1, 8$

10. $2x^2 - 17x + 19 = -16$
 $2x^2 - 17x + 35 = 0$
 $(x - 5)(2x - 7) = 0$
 $x = 5, 3 \frac{1}{2}$

5. $2x^2 + 15x - 10 = 17$
 $2x^2 + 15x - 27 = 0$
 $(x + 9)(2x - 3) = 0$
 $x = -9, 1 \frac{1}{2}$

11. $4x^2 - 4x - 14 = 10$
 $4x^2 - 4x - 24 = 0$
 $(2x + 4)(2x - 6) = 0$
 $x = -2, 3$

6. $2x^2 - 10x - 9 = 39$
 $2x^2 - 10x - 48 = 0$
 $(2x + 6)(x - 8) = 0$
 $x = -3, 8$

12. $2x^2 + 26x + 37 = -35$
 $2x^2 + 26x + 72 = 0$
 $(2x + 8)(x + 9) = 0$
 $x = -4, -9$

Résolution d'Équations Quadratiques (H)

Calculer les solutions des équations suivantes.

$$1. \quad x^2 - 3x - 50 = 4$$

$$7. \quad x^2 + 3x - 5 = 49$$

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

$$8. \quad 4x^2 + 12x - 4 = 3$$

$$3. \quad x^2 - 9x + 4 = -10$$

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

$$4. \quad x^2 - 2x - 41 = 22$$

$$10. \quad 2x^2 + 7x - 10 = 62$$

$$5. \quad 2x^2 - 17 = 1$$

$$11. \quad 4x^2 - 4x - 22 = 41$$

$$6. \quad 4x^2 + 2x - 2 = 28$$

$$12. \quad 4x^2 - 16x + 16 = 0$$

Résolution d'Équations Quadratiques (H) Réponses

Calculer les solutions des équations suivantes.

$$1. \quad x^2 - 3x - 50 = 4$$

$$x^2 - 3x - 54 = 0$$

$$(x - 9)(x + 6) = 0$$

$$x = 9, -6$$

$$7. \quad x^2 + 3x - 5 = 49$$

$$x^2 + 3x - 54 = 0$$

$$(x - 6)(x + 9) = 0$$

$$x = 6, -9$$

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

$$2x^2 + 18x + 28 = 0$$

$$(x + 7)(2x + 4) = 0$$

$$x = -7, -2$$

$$8. \quad 4x^2 + 12x - 4 = 3$$

$$4x^2 + 12x - 7 = 0$$

$$(2x + 7)(2x - 1) = 0$$

$$x = -3\frac{1}{2}, 1\frac{1}{2}$$

$$3. \quad x^2 - 9x + 4 = -10$$

$$x^2 - 9x + 14 = 0$$

$$(x - 2)(x - 7) = 0$$

$$x = 2, 7$$

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

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

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

$$x = 3, 7$$

$$4. \quad x^2 - 2x - 41 = 22$$

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

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

$$x = -7, 9$$

$$10. \quad 2x^2 + 7x - 10 = 62$$

$$2x^2 + 7x - 72 = 0$$

$$(2x - 9)(x + 8) = 0$$

$$x = 4\frac{1}{2}, -8$$

$$5. \quad 2x^2 - 17 = 1$$

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

$$(2x + 6)(x - 3) = 0$$

$$x = -3, 3$$

$$11. \quad 4x^2 - 4x - 22 = 41$$

$$4x^2 - 4x - 63 = 0$$

$$(2x - 9)(2x + 7) = 0$$

$$x = 4\frac{1}{2}, -3\frac{1}{2}$$

$$6. \quad 4x^2 + 2x - 2 = 28$$

$$4x^2 + 2x - 30 = 0$$

$$(2x + 6)(2x - 5) = 0$$

$$x = -3, 2\frac{1}{2}$$

$$12. \quad 4x^2 - 16x + 16 = 0$$

$$4x^2 - 16x + 16 = 0$$

$$(2x - 4)(2x - 4) = 0$$

$$x = 2$$

Résolution d'Équations Quadratiques (I)

Calculer les solutions des équations suivantes.

$$1. \quad 2x^2 + 14x + 2 = -18$$

$$7. \quad 4x^2 + 8x - 16 = 29$$

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

$$8. \quad x^2 + 4x + 3 = -1$$

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

$$9. \quad 2x^2 + 5x - 12 = 13$$

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

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

$$5. \quad 2x^2 + 18x + 28 = -12$$

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

$$6. \quad 2x^2 + 14x + 24 = 0$$

$$12. \quad 4x^2 - 6x + 1 = -1$$

Résolution d'Équations Quadratiques (I) Réponses

Calculer les solutions des équations suivantes.

1. $2x^2 + 14x + 2 = -18$
 $2x^2 + 14x + 20 = 0$
 $(2x + 4)(x + 5) = 0$
 $x = -2, -5$

7. $4x^2 + 8x - 16 = 29$
 $4x^2 + 8x - 45 = 0$
 $(2x - 5)(2x + 9) = 0$
 $x = 2 \frac{1}{2}, -4 \frac{1}{2}$

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

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

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

9. $2x^2 + 5x - 12 = 13$
 $2x^2 + 5x - 25 = 0$
 $(x + 5)(2x - 5) = 0$
 $x = -5, 2 \frac{1}{2}$

4. $2x^2 + 17x + 4 = -4$
 $2x^2 + 17x + 8 = 0$
 $(x + 8)(2x + 1) = 0$
 $x = -8, -\frac{1}{2}$

10. $2x^2 - 3x - 3 = 6$
 $2x^2 - 3x - 9 = 0$
 $(2x + 3)(x - 3) = 0$
 $x = -1 \frac{1}{2}, 3$

5. $2x^2 + 18x + 28 = -12$
 $2x^2 + 18x + 40 = 0$
 $(2x + 8)(x + 5) = 0$
 $x = -4, -5$

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

6. $2x^2 + 14x + 24 = 0$
 $2x^2 + 14x + 24 = 0$
 $(2x + 6)(x + 4) = 0$
 $x = -3, -4$

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

Résolution d'Équations Quadratiques (J)

Calculer les solutions des équations suivantes.

$$1. \quad 2x^2 - x - 40 = 5$$

$$7. \quad 4x^2 - 24x + 25 = -10$$

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

$$8. \quad x^2 + 14x + 24 = -21$$

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

$$9. \quad 2x^2 - 6x - 17 = 3$$

$$4. \quad x^2 - 27 = 22$$

$$10. \quad 2x^2 + 5x + 1 = -1$$

$$5. \quad 2x^2 - 14x + 20 = -4$$

$$11. \quad 4x^2 - 10x - 23 = 1$$

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

$$12. \quad x^2 - 2x - 4 = 11$$

Résolution d'Équations Quadratiques (J) Réponses

Calculer les solutions des équations suivantes.

$$1. \quad 2x^2 - x - 40 = 5$$

$$2x^2 - x - 45 = 0$$

$$(x - 5)(2x + 9) = 0$$

$$x = 5, -4 \frac{1}{2}$$

$$7. \quad 4x^2 - 24x + 25 = -10$$

$$4x^2 - 24x + 35 = 0$$

$$(2x - 7)(2x - 5) = 0$$

$$x = 3 \frac{1}{2}, 2 \frac{1}{2}$$

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

$$2x^2 - 14x + 24 = 0$$

$$(2x - 8)(x - 3) = 0$$

$$x = 4, 3$$

$$8. \quad x^2 + 14x + 24 = -21$$

$$x^2 + 14x + 45 = 0$$

$$(x + 5)(x + 9) = 0$$

$$x = -5, -9$$

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

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

$$(2x - 7)(x + 3) = 0$$

$$x = 3 \frac{1}{2}, -3$$

$$9. \quad 2x^2 - 6x - 17 = 3$$

$$2x^2 - 6x - 20 = 0$$

$$(x - 5)(2x + 4) = 0$$

$$x = 5, -2$$

$$4. \quad x^2 - 27 = 22$$

$$x^2 - 49 = 0$$

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

$$x = -7, 7$$

$$10. \quad 2x^2 + 5x + 1 = -1$$

$$2x^2 + 5x + 2 = 0$$

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

$$x = -\frac{1}{2}, -2$$

$$5. \quad 2x^2 - 14x + 20 = -4$$

$$2x^2 - 14x + 24 = 0$$

$$(2x - 6)(x - 4) = 0$$

$$x = 3, 4$$

$$11. \quad 4x^2 - 10x - 23 = 1$$

$$4x^2 - 10x - 24 = 0$$

$$(2x - 8)(2x + 3) = 0$$

$$x = 4, -1 \frac{1}{2}$$

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

$$2x^2 - 5x - 3 = 0$$

$$(x - 3)(2x + 1) = 0$$

$$x = 3, -\frac{1}{2}$$

$$12. \quad x^2 - 2x - 4 = 11$$

$$x^2 - 2x - 15 = 0$$

$$(x - 5)(x + 3) = 0$$

$$x = 5, -3$$