

Résolution d'Équations Quadratiques (A)

Calculer les solutions des équations suivantes.

1. $x^2 - 7x = -6$

7. $4x^2 + 8x - 1 = 11$

2. $-4x^2 + 18x - 6 = 2$

8. $2x^2 + 9x + 3 = -4$

3. $-2x^2 - 16x - 11 = 19$

9. $4x^2 - 4x - 11 = 24$

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

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

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

11. $2x^2 + 12x - 5 = 9$

6. $-2x^2 + 25x - 3 = 69$

12. $-x^2 + 11x - 9 = 21$

Résolution d'Équations Quadratiques (A) Réponses

Calculer les solutions des équations suivantes.

- $x^2 - 7x = -6$
 $x^2 - 7x + 6 = 0$
 $(x - 6)(x - 1) = 0$
 $x = 6, 1$
- $-4x^2 + 18x - 6 = 2$
 $-4x^2 + 18x - 8 = 0$
 $(2x - 8)(2x - 1) = 0$
 $x = 4, 1/2$
- $-2x^2 - 16x - 11 = 19$
 $-2x^2 - 16x - 30 = 0$
 $(x + 5)(2x + 6) = 0$
 $x = -5, -3$
- $-x^2 + 5x - 4 = 2$
 $-x^2 + 5x - 6 = 0$
 $-(x - 3)(x - 2) = 0$
 $x = 3, 2$
- $-x^2 - 2x + 11 = -13$
 $-x^2 - 2x + 24 = 0$
 $(x + 6)(x - 4) = 0$
 $x = -6, 4$
- $-2x^2 + 25x - 3 = 69$
 $-2x^2 + 25x - 72 = 0$
 $(x - 8)(2x - 9) = 0$
 $x = 8, 4 1/2$
- $4x^2 + 8x - 1 = 11$
 $4x^2 + 8x - 12 = 0$
 $(2x + 6)(2x - 2) = 0$
 $x = -3, 1$
- $2x^2 + 9x + 3 = -4$
 $2x^2 + 9x + 7 = 0$
 $(2x + 7)(x + 1) = 0$
 $x = -3 1/2, -1$
- $4x^2 - 4x - 11 = 24$
 $4x^2 - 4x - 35 = 0$
 $(2x - 7)(2x + 5) = 0$
 $x = 3 1/2, -2 1/2$
- $2x^2 + x - 4 = 2$
 $2x^2 + x - 6 = 0$
 $(2x - 3)(x + 2) = 0$
 $x = 1 1/2, -2$
- $2x^2 + 12x - 5 = 9$
 $2x^2 + 12x - 14 = 0$
 $(x + 7)(2x - 2) = 0$
 $x = -7, 1$
- $-x^2 + 11x - 9 = 21$
 $-x^2 + 11x - 30 = 0$
 $-(x - 6)(x - 5) = 0$
 $x = 6, 5$

Résolution d'Équations Quadratiques (B)

Calculer les solutions des équations suivantes.

1. $-x^2 - 6x - 1 = 7$

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

2. $2x^2 + 5x - 1 = 6$

8. $-4x^2 - 26x - 16 = 20$

3. $-x^2 - 13x - 1 = 35$

9. $-2x^2 - 17x - 11 = 10$

4. $4x^2 - 28x + 22 = -26$

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

5. $2x^2 + 5x - 5 = 7$

11. $x^2 - 15x + 8 = -46$

6. $2x^2 + 7x + 1 = -2$

12. $x^2 - x - 27 = 3$

Résolution d'Équations Quadratiques (B) Réponses

Calculer les solutions des équations suivantes.

1. $-x^2 - 6x - 1 = 7$
 $-x^2 - 6x - 8 = 0$
 $-(x + 4)(x + 2) = 0$
 $x = -4, -2$

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

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

8. $-4x^2 - 26x - 16 = 20$
 $-4x^2 - 26x - 36 = 0$
 $-(2x + 4)(2x + 9) = 0$
 $x = -2, -4 \frac{1}{2}$

3. $-x^2 - 13x - 1 = 35$
 $-x^2 - 13x - 36 = 0$
 $(x + 9)(x + 4) = 0$
 $x = -9, -4$

9. $-2x^2 - 17x - 11 = 10$
 $-2x^2 - 17x - 21 = 0$
 $-(x + 7)(2x + 3) = 0$
 $x = -7, -1 \frac{1}{2}$

4. $4x^2 - 28x + 22 = -26$
 $4x^2 - 28x + 48 = 0$
 $(2x - 6)(2x - 8) = 0$
 $x = 3, 4$

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

5. $2x^2 + 5x - 5 = 7$
 $2x^2 + 5x - 12 = 0$
 $(2x - 3)(x + 4) = 0$
 $x = 1 \frac{1}{2}, -4$

11. $x^2 - 15x + 8 = -46$
 $x^2 - 15x + 54 = 0$
 $(x - 9)(x - 6) = 0$
 $x = 9, 6$

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

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

Résolution d'Équations Quadratiques (C)

Calculer les solutions des équations suivantes.

1. $2x^2 - 17x + 29 = -7$

7. $-4x^2 + 2x + 7 = -23$

2. $-x^2 + 14x - 8 = 37$

8. $-2x^2 - 6x + 15 = -5$

3. $-x^2 - 15x - 14 = 40$

9. $4x^2 - 14x + 12 = 0$

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

10. $-2x^2 - 3x + 6 = -48$

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

11. $2x^2 - 5x - 1 = 2$

6. $2x^2 - 9x - 4 = 1$

12. $-4x^2 - 4x + 8 = -7$

Résolution d'Équations Quadratiques (C) Réponses

Calculer les solutions des équations suivantes.

1. $2x^2 - 17x + 29 = -7$
 $2x^2 - 17x + 36 = 0$
 $(2x - 9)(x - 4) = 0$
 $x = 4 \frac{1}{2}, 4$

2. $-x^2 + 14x - 8 = 37$
 $-x^2 + 14x - 45 = 0$
 $(x - 9)(x - 5) = 0$
 $x = 9, 5$

3. $-x^2 - 15x - 14 = 40$
 $-x^2 - 15x - 54 = 0$
 $(x + 9)(x + 6) = 0$
 $x = -9, -6$

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

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

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

7. $-4x^2 + 2x + 7 = -23$
 $-4x^2 + 2x + 30 = 0$
 $-(2x - 6)(2x + 5) = 0$
 $x = 3, -2 \frac{1}{2}$

8. $-2x^2 - 6x + 15 = -5$
 $-2x^2 - 6x + 20 = 0$
 $-(x + 5)(2x - 4) = 0$
 $x = -5, 2$

9. $4x^2 - 14x + 12 = 0$
 $4x^2 - 14x + 12 = 0$
 $(2x - 4)(2x - 3) = 0$
 $x = 2, 1 \frac{1}{2}$

10. $-2x^2 - 3x + 6 = -48$
 $-2x^2 - 3x + 54 = 0$
 $-(2x - 9)(x + 6) = 0$
 $x = 4 \frac{1}{2}, -6$

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

12. $-4x^2 - 4x + 8 = -7$
 $-4x^2 - 4x + 15 = 0$
 $-(2x - 3)(2x + 5) = 0$
 $x = 1 \frac{1}{2}, -2 \frac{1}{2}$

Résolution d'Équations Quadratiques (D)

Calculer les solutions des équations suivantes.

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

7. $4x^2 - 8x + 1 = -2$

2. $-x^2 + 3x + 10 = 0$

8. $-2x^2 - 3x + 4 = -5$

3. $-2x^2 - 22x - 14 = 34$

9. $-2x^2 + 8x + 40 = -2$

4. $-2x^2 + 13x - 4 = 2$

10. $-2x^2 - 6x + 5 = -51$

5. $4x^2 - 14x - 16 = 2$

11. $-2x^2 - 7x + 9 = 0$

6. $-x^2 - 5x + 5 = -1$

12. $-2x^2 + 16 = -2$

Résolution d'Équations Quadratiques (D) Réponses

Calculer les solutions des équations suivantes.

1. $x^2 + 8x + 5 = -2$
 $x^2 + 8x + 7 = 0$
 $(x + 1)(x + 7) = 0$
 $x = -1, -7$

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

3. $-2x^2 - 22x - 14 = 34$
 $-2x^2 - 22x - 48 = 0$
 $(x + 8)(2x + 6) = 0$
 $x = -8, -3$

4. $-2x^2 + 13x - 4 = 2$
 $-2x^2 + 13x - 6 = 0$
 $-(x - 6)(2x - 1) = 0$
 $x = 6, 1/2$

5. $4x^2 - 14x - 16 = 2$
 $4x^2 - 14x - 18 = 0$
 $(2x - 9)(2x + 2) = 0$
 $x = 4 1/2, -1$

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

7. $4x^2 - 8x + 1 = -2$
 $4x^2 - 8x + 3 = 0$
 $(2x - 1)(2x - 3) = 0$
 $x = 1/2, 1 1/2$

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

9. $-2x^2 + 8x + 40 = -2$
 $-2x^2 + 8x + 42 = 0$
 $-(x - 7)(2x + 6) = 0$
 $x = 7, -3$

10. $-2x^2 - 6x + 5 = -51$
 $-2x^2 - 6x + 56 = 0$
 $-(x + 7)(2x - 8) = 0$
 $x = -7, 4$

11. $-2x^2 - 7x + 9 = 0$
 $-2x^2 - 7x + 9 = 0$
 $-(2x + 9)(x - 1) = 0$
 $x = -4 1/2, 1$

12. $-2x^2 + 16 = -2$
 $-2x^2 + 18 = 0$
 $-(2x - 6)(x + 3) = 0$
 $x = 3, -3$

Résolution d'Équations Quadratiques (E)

Calculer les solutions des équations suivantes.

1. $-2x^2 - 13x + 7 = 0$

7. $2x^2 - 7x - 47 = 2$

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

8. $4x^2 - 2x - 11 = 1$

3. $-x^2 - 6x - 1 = 4$

9. $-x^2 - 10x - 1 = 20$

4. $-2x^2 + x + 13 = -32$

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

5. $-4x^2 + 24x - 19 = 16$

11. $2x^2 + 4x - 1 = 15$

6. $-2x^2 + 23x - 33 = 12$

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

Résolution d'Équations Quadratiques (E) Réponses

Calculer les solutions des équations suivantes.

1. $-2x^2 - 13x + 7 = 0$
 $-2x^2 - 13x + 7 = 0$
 $-(x + 7)(2x - 1) = 0$
 $x = -7, 1/2$

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

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

4. $-2x^2 + x + 13 = -32$
 $-2x^2 + x + 45 = 0$
 $-(2x + 9)(x - 5) = 0$
 $x = -4 1/2, 5$

5. $-4x^2 + 24x - 19 = 16$
 $-4x^2 + 24x - 35 = 0$
 $(2x - 5)(2x - 7) = 0$
 $x = 2 1/2, 3 1/2$

6. $-2x^2 + 23x - 33 = 12$
 $-2x^2 + 23x - 45 = 0$
 $(2x - 5)(x - 9) = 0$
 $x = 2 1/2, 9$

7. $2x^2 - 7x - 47 = 2$
 $2x^2 - 7x - 49 = 0$
 $(x - 7)(2x + 7) = 0$
 $x = 7, -3 1/2$

8. $4x^2 - 2x - 11 = 1$
 $4x^2 - 2x - 12 = 0$
 $(2x + 3)(2x - 4) = 0$
 $x = -1 1/2, 2$

9. $-x^2 - 10x - 1 = 20$
 $-x^2 - 10x - 21 = 0$
 $-(x + 7)(x + 3) = 0$
 $x = -7, -3$

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

11. $2x^2 + 4x - 1 = 15$
 $2x^2 + 4x - 16 = 0$
 $(2x + 8)(x - 2) = 0$
 $x = -4, 2$

12. $2x^2 - 11x + 7 = -2$
 $2x^2 - 11x + 9 = 0$
 $(x - 1)(2x - 9) = 0$
 $x = 1, 4 1/2$

Résolution d'Équations Quadratiques (F)

Calculer les solutions des équations suivantes.

1. $-4x^2 + 22x - 11 = 7$

7. $2x^2 - 22x + 47 = -1$

2. $x^2 + 3x = -2$

8. $-2x^2 - 15x - 3 = 4$

3. $2x^2 - 4x - 6 = 10$

9. $-2x^2 + 11x - 6 = 6$

4. $x^2 + 8x - 2 = 7$

10. $2x^2 + 20x + 3 = -15$

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

11. $2x^2 + 19x + 33 = -12$

6. $4x^2 + 30x + 46 = -10$

12. $-2x^2 - 15x - 16 = 2$

Résolution d'Équations Quadratiques (F) Réponses

Calculer les solutions des équations suivantes.

1. $-4x^2 + 22x - 11 = 7$
 $-4x^2 + 22x - 18 = 0$
 $-(2x - 2)(2x - 9) = 0$
 $x = 1, 4 \frac{1}{2}$

7. $2x^2 - 22x + 47 = -1$
 $2x^2 - 22x + 48 = 0$
 $(2x - 6)(x - 8) = 0$
 $x = 3, 8$

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

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

3. $2x^2 - 4x - 6 = 10$
 $2x^2 - 4x - 16 = 0$
 $(x - 4)(2x + 4) = 0$
 $x = 4, -2$

9. $-2x^2 + 11x - 6 = 6$
 $-2x^2 + 11x - 12 = 0$
 $-(2x - 3)(x - 4) = 0$
 $x = 1 \frac{1}{2}, 4$

4. $x^2 + 8x - 2 = 7$
 $x^2 + 8x - 9 = 0$
 $(x - 1)(x + 9) = 0$
 $x = 1, -9$

10. $2x^2 + 20x + 3 = -15$
 $2x^2 + 20x + 18 = 0$
 $(2x + 2)(x + 9) = 0$
 $x = -1, -9$

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

11. $2x^2 + 19x + 33 = -12$
 $2x^2 + 19x + 45 = 0$
 $(x + 5)(2x + 9) = 0$
 $x = -5, -4 \frac{1}{2}$

6. $4x^2 + 30x + 46 = -10$
 $4x^2 + 30x + 56 = 0$
 $(2x + 7)(2x + 8) = 0$
 $x = -3 \frac{1}{2}, -4$

12. $-2x^2 - 15x - 16 = 2$
 $-2x^2 - 15x - 18 = 0$
 $-(x + 6)(2x + 3) = 0$
 $x = -6, -1 \frac{1}{2}$

Résolution d'Équations Quadratiques (G)

Calculer les solutions des équations suivantes.

1. $2x^2 - 13x + 15 = 0$

7. $2x^2 + 3x - 4 = 16$

2. $-4x^2 - 10x + 14 = 0$

8. $4x^2 - 10x - 9 = 27$

3. $-2x^2 + 15x + 6 = -2$

9. $-2x^2 + 4x + 13 = -17$

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

10. $2x^2 + 10x + 4 = -8$

5. $2x^2 - 3x - 2 = 18$

11. $x^2 - x - 12 = 18$

6. $2x^2 + 4x - 28 = 20$

12. $-4x^2 - 4x + 13 = -11$

Résolution d'Équations Quadratiques (G) Réponses

Calculer les solutions des équations suivantes.

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

2. $-4x^2 - 10x + 14 = 0$
 $-4x^2 - 10x + 14 = 0$
 $(2x + 7)(2x - 2) = 0$
 $x = -3 \frac{1}{2}, 1$

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

4. $-4x^2 + 22x - 24 = 4$
 $-4x^2 + 22x - 28 = 0$
 $-(2x - 4)(2x - 7) = 0$
 $x = 2, 3 \frac{1}{2}$

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

6. $2x^2 + 4x - 28 = 20$
 $2x^2 + 4x - 48 = 0$
 $(x + 6)(2x - 8) = 0$
 $x = -6, 4$

7. $2x^2 + 3x - 4 = 16$
 $2x^2 + 3x - 20 = 0$
 $(x + 4)(2x - 5) = 0$
 $x = -4, 2 \frac{1}{2}$

8. $4x^2 - 10x - 9 = 27$
 $4x^2 - 10x - 36 = 0$
 $(2x - 9)(2x + 4) = 0$
 $x = 4 \frac{1}{2}, -2$

9. $-2x^2 + 4x + 13 = -17$
 $-2x^2 + 4x + 30 = 0$
 $-(2x + 6)(x - 5) = 0$
 $x = -3, 5$

10. $2x^2 + 10x + 4 = -8$
 $2x^2 + 10x + 12 = 0$
 $(2x + 4)(x + 3) = 0$
 $x = -2, -3$

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

12. $-4x^2 - 4x + 13 = -11$
 $-4x^2 - 4x + 24 = 0$
 $-(2x - 4)(2x + 6) = 0$
 $x = 2, -3$

Résolution d'Équations Quadratiques (H)

Calculer les solutions des équations suivantes.

1. $2x^2 - 14x = -12$

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

2. $-x^2 - 4x = -21$

8. $-x^2 + x + 57 = -15$

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

9. $x^2 + x - 3 = 9$

4. $2x^2 + 27x + 29 = -52$

10. $-2x^2 - 4x - 1 = 1$

5. $2x^2 - 11x + 2 = -7$

11. $4x^2 - 6x - 1 = 3$

6. $-2x^2 + 15x + 5 = -22$

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

Résolution d'Équations Quadratiques (H) Réponses

Calculer les solutions des équations suivantes.

- $2x^2 - 14x = -12$
 $2x^2 - 14x + 12 = 0$
 $(2x - 2)(x - 6) = 0$
 $x = 1, 6$
- $-x^2 - 4x = -21$
 $-x^2 - 4x + 21 = 0$
 $(x - 3)(x + 7) = 0$
 $x = 3, -7$
- $-2x^2 - x + 2 = -1$
 $-2x^2 - x + 3 = 0$
 $(x - 1)(2x + 3) = 0$
 $x = 1, -1 \frac{1}{2}$
- $2x^2 + 27x + 29 = -52$
 $2x^2 + 27x + 81 = 0$
 $(x + 9)(2x + 9) = 0$
 $x = -9, -4 \frac{1}{2}$
- $2x^2 - 11x + 2 = -7$
 $2x^2 - 11x + 9 = 0$
 $(x - 1)(2x - 9) = 0$
 $x = 1, 4 \frac{1}{2}$
- $-2x^2 + 15x + 5 = -22$
 $-2x^2 + 15x + 27 = 0$
 $(x - 9)(2x + 3) = 0$
 $x = 9, -1 \frac{1}{2}$
- $-4x^2 + 6 = -10$
 $-4x^2 + 16 = 0$
 $-(2x - 4)(2x + 4) = 0$
 $x = 2, -2$
- $-x^2 + x + 57 = -15$
 $-x^2 + x + 72 = 0$
 $-(x - 9)(x + 8) = 0$
 $x = 9, -8$
- $x^2 + x - 3 = 9$
 $x^2 + x - 12 = 0$
 $(x - 3)(x + 4) = 0$
 $x = 3, -4$
- $-2x^2 - 4x - 1 = 1$
 $-2x^2 - 4x - 2 = 0$
 $-(2x + 2)(x + 1) = 0$
 $x = -1$
- $4x^2 - 6x - 1 = 3$
 $4x^2 - 6x - 4 = 0$
 $(2x - 4)(2x + 1) = 0$
 $x = 2, -\frac{1}{2}$
- $2x^2 + 4x - 4 = 2$
 $2x^2 + 4x - 6 = 0$
 $(x - 1)(2x + 6) = 0$
 $x = 1, -3$

Résolution d'Équations Quadratiques (I)

Calculer les solutions des équations suivantes.

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

7. $4x^2 + 8x - 2 = 3$

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

8. $x^2 + 2x - 45 = 18$

3. $-2x^2 - 12x - 4 = 12$

9. $-2x^2 + 11x - 12 = 2$

4. $2x^2 + 9x - 45 = 36$

10. $-2x^2 - x + 1 = 0$

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

11. $-4x^2 - 26x - 37 = 5$

6. $2x^2 + 3x - 5 = 9$

12. $-2x^2 - 5x + 7 = -11$

Résolution d'Équations Quadratiques (I) Réponses

Calculer les solutions des équations suivantes.

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

7. $4x^2 + 8x - 2 = 3$
 $4x^2 + 8x - 5 = 0$
 $(2x - 1)(2x + 5) = 0$
 $x = 1/2, -2 \frac{1}{2}$

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

8. $x^2 + 2x - 45 = 18$
 $x^2 + 2x - 63 = 0$
 $(x - 7)(x + 9) = 0$
 $x = 7, -9$

3. $-2x^2 - 12x - 4 = 12$
 $-2x^2 - 12x - 16 = 0$
 $(2x + 4)(x + 4) = 0$
 $x = -2, -4$

9. $-2x^2 + 11x - 12 = 2$
 $-2x^2 + 11x - 14 = 0$
 $-(x - 2)(2x - 7) = 0$
 $x = 2, 3 \frac{1}{2}$

4. $2x^2 + 9x - 45 = 36$
 $2x^2 + 9x - 81 = 0$
 $(x + 9)(2x - 9) = 0$
 $x = -9, 4 \frac{1}{2}$

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

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

11. $-4x^2 - 26x - 37 = 5$
 $-4x^2 - 26x - 42 = 0$
 $-(2x + 7)(2x + 6) = 0$
 $x = -3 \frac{1}{2}, -3$

6. $2x^2 + 3x - 5 = 9$
 $2x^2 + 3x - 14 = 0$
 $(x - 2)(2x + 7) = 0$
 $x = 2, -3 \frac{1}{2}$

12. $-2x^2 - 5x + 7 = -11$
 $-2x^2 - 5x + 18 = 0$
 $-(x - 2)(2x + 9) = 0$
 $x = 2, -4 \frac{1}{2}$

Résolution d'Équations Quadratiques (J)

Calculer les solutions des équations suivantes.

1. $x^2 - x - 33 = 23$

7. $-4x^2 + 22x - 6 = 18$

2. $4x^2 - 16x - 2 = 7$

8. $-2x^2 - 2x + 1 = -11$

3. $4x^2 - 12x + 5 = 0$

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

4. $x^2 - 13x + 16 = -20$

10. $-4x^2 - 22x - 15 = 9$

5. $4x^2 + 24x + 22 = -13$

11. $-x^2 + 11 = -5$

6. $-2x^2 + 12x + 29 = -3$

12. $-2x^2 + 2x + 14 = -10$

Résolution d'Équations Quadratiques (J) Réponses

Calculer les solutions des équations suivantes.

1. $x^2 - x - 33 = 23$
 $x^2 - x - 56 = 0$
 $(x + 7)(x - 8) = 0$
 $x = -7, 8$

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

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

4. $x^2 - 13x + 16 = -20$
 $x^2 - 13x + 36 = 0$
 $(x - 4)(x - 9) = 0$
 $x = 4, 9$

5. $4x^2 + 24x + 22 = -13$
 $4x^2 + 24x + 35 = 0$
 $(2x + 7)(2x + 5) = 0$
 $x = -3 \frac{1}{2}, -2 \frac{1}{2}$

6. $-2x^2 + 12x + 29 = -3$
 $-2x^2 + 12x + 32 = 0$
 $(x - 8)(2x + 4) = 0$
 $x = 8, -2$

7. $-4x^2 + 22x - 6 = 18$
 $-4x^2 + 22x - 24 = 0$
 $-(2x - 3)(2x - 8) = 0$
 $x = 1 \frac{1}{2}, 4$

8. $-2x^2 - 2x + 1 = -11$
 $-2x^2 - 2x + 12 = 0$
 $-(x - 2)(2x + 6) = 0$
 $x = 2, -3$

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

10. $-4x^2 - 22x - 15 = 9$
 $-4x^2 - 22x - 24 = 0$
 $-(2x + 3)(2x + 8) = 0$
 $x = -1 \frac{1}{2}, -4$

11. $-x^2 + 11 = -5$
 $-x^2 + 16 = 0$
 $-(x - 4)(x + 4) = 0$
 $x = 4, -4$

12. $-2x^2 + 2x + 14 = -10$
 $-2x^2 + 2x + 24 = 0$
 $-(x + 3)(2x - 8) = 0$
 $x = -3, 4$