Résolution d'Équations Quadratiques (A)

Calculer les solutions des équations suivantes.

1. $-20x^2 - 17x + 43 = -20$

2. $42x^2 + 20x - 10 = 22$

3. $-6x^2 - 38x + 3 = -25$

4. $21x^2 + 31x = -4$

5. $-27x^2 - 42x + 3 = -2$

6. $-18x^2 + 3x + 1 = 0$

7. $-20x^2 + 13x + 18 = -54$

8. $64x^2 - 32x - 29 = 3$

9. $45x^2 - 62x - 8 = 8$

10. $-16x^2 + 8x + 20 = -43$

11. $20x^2 - 18x - 10 = 4$

12. $-24x^2 - 4x + 40 = -8$

Résolution d'Équations Quadratiques (A) Réponses

Calculer les solutions des équations suivantes.

1. $-20x^2 - 17x + 43 = -20$
   $-20x^2 - 17x + 63 = 0$
   $-(5x - 7)(4x + 9) = 0$
   $x = 1\ 2/5,\ \ -2\ 1/4$

2. $42x^2 + 20x - 10 = 22$
   $42x^2 + 20x - 32 = 0$
   $(6x - 4)(7x + 8) = 0$
   $x = 2/3,\ \ -1\ 1/7$

3. $-6x^2 - 38x + 3 = -25$
   $-6x^2 - 38x + 28 = 0$
   $(6x - 4)(x + 7) = 0$
   $x = 2/3,\ \ -7$

4. $21x^2 + 31x = -4$
   $21x^2 + 31x + 4 = 0$
   $(7x + 1)(3x + 4) = 0$
   $x = -1/7,\ \ -1\ 1/3$

5. $-27x^2 - 42x + 3 = -2$
   $-27x^2 - 42x + 5 = 0$
   $(3x + 5)(9x - 1) = 0$
   $x = -1\ 2/3,\ \ 1/9$

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

7. $-20x^2 + 13x + 18 = -54$
   $-20x^2 + 13x + 72 = 0$
   $-(4x - 9)(5x + 8) = 0$
   $x = 2\ 1/4,\ \ -1\ 3/5$

8. $64x^2 - 32x - 29 = 3$
   $64x^2 - 32x - 32 = 0$
   $(8x - 8)(8x + 4) = 0$
   $x = 1\ ,\ \ -1/2$

9. $45x^2 - 62x - 8 = 8$
   $45x^2 - 62x - 16 = 0$
   $(5x - 8)(9x + 2) = 0$
   $x = 1\ 3/5,\ \ -2/9$

10. $-16x^2 + 8x + 20 = -43$
    $-16x^2 + 8x + 63 = 0$
    $-(4x + 7)(4x - 9) = 0$
    $x = -1\ 3/4,\ \ 2\ 1/4$

11. $20x^2 - 18x - 10 = 4$
    $20x^2 - 18x - 14 = 0$
    $(5x - 7)(4x + 2) = 0$
    $x = 1\ 2/5,\ \ -1/2$

12. $-24x^2 - 4x + 40 = -8$
    $-24x^2 - 4x + 48 = 0$
    $-(6x - 8)(4x + 6) = 0$
    $x = 1\ 1/3,\ \ -1\ 1/2$

Résolution d'Équations Quadratiques (B)

Calculer les solutions des équations suivantes.

1. $-72x^2 + 126x - 3 = 51$
2. $-56x^2 - 30x + 28 = -26$
3. $9x^2 - 59x + 14 = -16$
4. $36x^2 - 6x - 2 = 4$
5. $7x^2 + 62x - 2 = 7$
6. $-9x^2 + 69x - 22 = 20$
7. $-40x^2 + 22x + 4 = -4$
8. $4x^2 + 12x - 6 = 1$
9. $4x^2 + 13x + 4 = -6$
10. $-6x^2 + 20x + 7 = -9$
11. $-28x^2 + 72x - 26 = 6$
12. $-25x^2 - 30x + 3 = -24$

Résolution d'Équations Quadratiques (B) Réponses

Calculer les solutions des équations suivantes.

1. $-72x^2 + 126x - 3 = 51$
   $-72x^2 + 126x - 54 = 0$
   $-(8x - 6)(9x - 9) = 0$
   $x = 3/4,\ 1$

2. $-56x^2 - 30x + 28 = -26$
   $-56x^2 - 30x + 54 = 0$
   $(7x + 9)(8x - 6) = 0$
   $x = -1\ 2/7,\ 3/4$

3. $9x^2 - 59x + 14 = -16$
   $9x^2 - 59x + 30 = 0$
   $(x - 6)(9x - 5) = 0$
   $x = 6,\ 5/9$

4. $36x^2 - 6x - 2 = 4$
   $36x^2 - 6x - 6 = 0$
   $(4x - 2)(9x + 3) = 0$
   $x = 1/2,\ -1/3$

5. $7x^2 + 62x - 2 = 7$
   $7x^2 + 62x - 9 = 0$
   $(x + 9)(7x - 1) = 0$
   $x = -9,\ 1/7$

6. $-9x^2 + 69x - 22 = 20$
   $-9x^2 + 69x - 42 = 0$
   $(9x - 6)(x - 7) = 0$
   $x = 2/3,\ 7$

7. $-40x^2 + 22x + 4 = -4$
   $-40x^2 + 22x + 8 = 0$
   $-(8x + 2)(5x - 4) = 0$
   $x = -1/4,\ 4/5$

8. $4x^2 + 12x - 6 = 1$
   $4x^2 + 12x - 7 = 0$
   $(2x + 7)(2x - 1) = 0$
   $x = -3\ 1/2,\ 1/2$

9. $4x^2 + 13x + 4 = -6$
   $4x^2 + 13x + 10 = 0$
   $(4x + 5)(x + 2) = 0$
   $x = -1\ 1/4,\ -2$

10. $-6x^2 + 20x + 7 = -9$
    $-6x^2 + 20x + 16 = 0$
    $-(6x + 4)(x - 4) = 0$
    $x = -2/3,\ 4$

11. $-28x^2 + 72x - 26 = 6$
    $-28x^2 + 72x - 32 = 0$
    $-(7x - 4)(4x - 8) = 0$
    $x = 4/7,\ 2$

12. $-25x^2 - 30x + 3 = -24$
    $-25x^2 - 30x + 27 = 0$
    $-(5x + 9)(5x - 3) = 0$
    $x = -1\ 4/5,\ 3/5$

Résolution d'Équations Quadratiques (C)

Calculer les solutions des équations suivantes.

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

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

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

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

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

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

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

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

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

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

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

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

Résolution d'Équations Quadratiques (C) Réponses

Calculer les solutions des équations suivantes.

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

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

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

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

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

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

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

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

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

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

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

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

Résolution d'Équations Quadratiques (D)

Calculer les solutions des équations suivantes.

1. $-18x^2 + 30x - 6 = 2$
2. $-18x^2 + 48x - 13 = 11$
3. $-15x^2 - 40x - 23 = 2$
4. $3x^2 - 28x + 6 = -26$
5. $-28x^2 + 13x = -5$
6. $36x^2 + 5x - 1 = 0$
7. $8x^2 - 36x - 11 = 9$
8. $-6x^2 + 24x + 8 = -22$
9. $20x^2 + 36x - 7 = 1$
10. $14x^2 - 23x - 20 = 10$
11. $40x^2 - 49x - 2 = 22$
12. $-40x^2 - 38x - 5 = 1$

Résolution d'Équations Quadratiques (D) Réponses

Calculer les solutions des équations suivantes.

1. $-18x^2 + 30x - 6 = 2$
   $-18x^2 + 30x - 8 = 0$
   $-(6x - 8)(3x - 1) = 0$
   $x = 1\ 1/3,\quad 1/3$

2. $-18x^2 + 48x - 13 = 11$
   $-18x^2 + 48x - 24 = 0$
   $(9x - 6)(2x - 4) = 0$
   $x = 2/3,\quad 2$

3. $-15x^2 - 40x - 23 = 2$
   $-15x^2 - 40x - 25 = 0$
   $(3x + 5)(5x + 5) = 0$
   $x = -1\ 2/3,\quad -1$

4. $3x^2 - 28x + 6 = -26$
   $3x^2 - 28x + 32 = 0$
   $(x - 8)(3x - 4) = 0$
   $x = 8\ ,\quad 1\ 1/3$

5. $-28x^2 + 13x = -5$
   $-28x^2 + 13x + 5 = 0$
   $(4x + 1)(7x - 5) = 0$
   $x = -1/4,\quad 5/7$

6. $36x^2 + 5x - 1 = 0$
   $36x^2 + 5x - 1 = 0$
   $(4x + 1)(9x - 1) = 0$
   $x = -1/4,\quad 1/9$

7. $8x^2 - 36x - 11 = 9$
   $8x^2 - 36x - 20 = 0$
   $(8x + 4)(x - 5) = 0$
   $x = -1/2,\quad 5$

8. $-6x^2 + 24x + 8 = -22$
   $-6x^2 + 24x + 30 = 0$
   $-(6x + 6)(x - 5) = 0$
   $x = -1\ ,\quad 5$

9. $20x^2 + 36x - 7 = 1$
   $20x^2 + 36x - 8 = 0$
   $(4x + 8)(5x - 1) = 0$
   $x = -2\ ,\quad 1/5$

10. $14x^2 - 23x - 20 = 10$
    $14x^2 - 23x - 30 = 0$
    $(2x - 5)(7x + 6) = 0$
    $x = 2\ 1/2,\quad -6/7$

11. $40x^2 - 49x - 2 = 22$
    $40x^2 - 49x - 24 = 0$
    $(8x + 3)(5x - 8) = 0$
    $x = -3/8,\quad 1\ 3/5$

12. $-40x^2 - 38x - 5 = 1$
    $-40x^2 - 38x - 6 = 0$
    $-(8x + 6)(5x + 1) = 0$
    $x = -3/4,\quad -1/5$

Résolution d'Équations Quadratiques (E)

Calculer les solutions des équations suivantes.

1. $8x^2 - 15 = 17$
2. $63x^2 - 60x - 5 = 22$
3. $-5x^2 - 25x - 7 = 13$
4. $24x^2 + 52x = -24$
5. $24x^2 + 60x + 20 = -16$
6. $5x^2 + 11x - 26 = 10$
7. $-30x^2 + 59x - 7 = 21$
8. $-28x^2 - 43x + 16 = -29$
9. $-9x^2 + 51x - 6 = 24$
10. $30x^2 + 23x - 9 = 5$
11. $30x^2 - 65x + 14 = -21$
12. $-24x^2 - 24x + 22 = -26$

Résolution d'Équations Quadratiques (E) Réponses

Calculer les solutions des équations suivantes.

1. $8x^2 - 15 = 17$
   $8x^2 - 32 = 0$
   $(2x - 4)(4x + 8) = 0$
   $x = 2\ ,\ -2$

2. $63x^2 - 60x - 5 = 22$
   $63x^2 - 60x - 27 = 0$
   $(7x - 9)(9x + 3) = 0$
   $x = 1\ 2/7,\ -1/3$

3. $-5x^2 - 25x - 7 = 13$
   $-5x^2 - 25x - 20 = 0$
   $(5x + 5)(x + 4) = 0$
   $x = -1\ ,\ -4$

4. $24x^2 + 52x = -24$
   $24x^2 + 52x + 24 = 0$
   $(6x + 4)(4x + 6) = 0$
   $x = -2/3,\ -1\ 1/2$

5. $24x^2 + 60x + 20 = -16$
   $24x^2 + 60x + 36 = 0$
   $(4x + 6)(6x + 6) = 0$
   $x = -1\ 1/2,\ -1$

6. $5x^2 + 11x - 26 = 10$
   $5x^2 + 11x - 36 = 0$
   $(x + 4)(5x - 9) = 0$
   $x = -4\ ,\ 1\ 4/5$

7. $-30x^2 + 59x - 7 = 21$
   $-30x^2 + 59x - 28 = 0$
   $-(6x - 7)(5x - 4) = 0$
   $x = 1\ 1/6,\ 4/5$

8. $-28x^2 - 43x + 16 = -29$
   $-28x^2 - 43x + 45 = 0$
   $-(4x + 9)(7x - 5) = 0$
   $x = -2\ 1/4,\ 5/7$

9. $-9x^2 + 51x - 6 = 24$
   $-9x^2 + 51x - 30 = 0$
   $-(x - 5)(9x - 6) = 0$
   $x = 5\ ,\ 2/3$

10. $30x^2 + 23x - 9 = 5$
    $30x^2 + 23x - 14 = 0$
    $(5x - 2)(6x + 7) = 0$
    $x = 2/5,\ -1\ 1/6$

11. $30x^2 - 65x + 14 = -21$
    $30x^2 - 65x + 35 = 0$
    $(6x - 7)(5x - 5) = 0$
    $x = 1\ 1/6,\ 1$

12. $-24x^2 - 24x + 22 = -26$
    $-24x^2 - 24x + 48 = 0$
    $-(6x - 6)(4x + 8) = 0$
    $x = 1\ ,\ -2$

Résolution d'Équations Quadratiques (F)

Calculer les solutions des équations suivantes.

1. $-45x^2 - 4x = -1$
2. $-6x^2 + 38x - 5 = 35$
3. $4x^2 + 12x - 6 = 1$
4. $24x^2 + 63x + 9 = -21$
5. $-6x^2 + 3x = -3$
6. $56x^2 + 50x = -6$
7. $36x^2 - 60x - 6 = 18$
8. $8x^2 + 36x + 3 = -13$
9. $-6x^2 - 51x - 16 = 8$
10. $-21x^2 + 53x - 13 = 17$
11. $32x^2 - 72x + 2 = -14$
12. $-48x^2 - 28x + 47 = -1$

Résolution d'Équations Quadratiques (F) Réponses

Calculer les solutions des équations suivantes.

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

2. $-6x^2 + 38x - 5 = 35$
   $-6x^2 + 38x - 40 = 0$
   $(6x - 8)(x - 5) = 0$
   $x = 1\ 1/3,\ 5$

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

4. $24x^2 + 63x + 9 = -21$
   $24x^2 + 63x + 30 = 0$
   $(8x + 5)(3x + 6) = 0$
   $x = -5/8,\ -2$

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

6. $56x^2 + 50x = -6$
   $56x^2 + 50x + 6 = 0$
   $(7x + 1)(8x + 6) = 0$
   $x = -1/7,\ -3/4$

7. $36x^2 - 60x - 6 = 18$
   $36x^2 - 60x - 24 = 0$
   $(4x - 8)(9x + 3) = 0$
   $x = 2,\ -1/3$

8. $8x^2 + 36x + 3 = -13$
   $8x^2 + 36x + 16 = 0$
   $(4x + 2)(2x + 8) = 0$
   $x = -1/2,\ -4$

9. $-6x^2 - 51x - 16 = 8$
   $-6x^2 - 51x - 24 = 0$
   $-(6x + 3)(x + 8) = 0$
   $x = -1/2,\ -8$

10. $-21x^2 + 53x - 13 = 17$
    $-21x^2 + 53x - 30 = 0$
    $-(7x - 6)(3x - 5) = 0$
    $x = 6/7,\ 1\ 2/3$

11. $32x^2 - 72x + 2 = -14$
    $32x^2 - 72x + 16 = 0$
    $(8x - 2)(4x - 8) = 0$
    $x = 1/4,\ 2$

12. $-48x^2 - 28x + 47 = -1$
    $-48x^2 - 28x + 48 = 0$
    $-(6x + 8)(8x - 6) = 0$
    $x = -1\ 1/3,\ 3/4$

Résolution d'Équations Quadratiques (G)

Calculer les solutions des équations suivantes.

1. $-20x^2 - 62x - 43 = 5$

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

3. $12x^2 + 60x + 26 = -46$

4. $-64x^2 - 40x + 6 = 0$

5. $-21x^2 - 73x - 42 = 14$

6. $18x^2 + 63x + 40 = -14$

7. $-15x^2 - 30x + 40 = -5$

8. $27x^2 - 12x = -1$

9. $54x^2 - 21x - 1 = 2$

10. $8x^2 - 24x - 13 = 1$

11. $-6x^2 - 30x - 5 = 19$

12. $27x^2 - 102x + 15 = -48$

Résolution d'Équations Quadratiques (G) Réponses

Calculer les solutions des équations suivantes.

1. $-20x^2 - 62x - 43 = 5$
   $-20x^2 - 62x - 48 = 0$
   $-(4x + 6)(5x + 8) = 0$
   $x = -1\ 1/2,\ \ -1\ 3/5$

2. $12x^2 + 14x - 2 = 4$
   $12x^2 + 14x - 6 = 0$
   $(6x - 2)(2x + 3) = 0$
   $x = 1/3,\ \ -1\ 1/2$

3. $12x^2 + 60x + 26 = -46$
   $12x^2 + 60x + 72 = 0$
   $(4x + 8)(3x + 9) = 0$
   $x = -2\ ,\ \ -3$

4. $-64x^2 - 40x + 6 = 0$
   $-64x^2 - 40x + 6 = 0$
   $-(8x - 1)(8x + 6) = 0$
   $x = 1/8,\ \ -3/4$

5. $-21x^2 - 73x - 42 = 14$
   $-21x^2 - 73x - 56 = 0$
   $(3x + 7)(7x + 8) = 0$
   $x = -2\ 1/3,\ \ -1\ 1/7$

6. $18x^2 + 63x + 40 = -14$
   $18x^2 + 63x + 54 = 0$
   $(3x + 6)(6x + 9) = 0$
   $x = -2\ ,\ \ -1\ 1/2$

7. $-15x^2 - 30x + 40 = -5$
   $-15x^2 - 30x + 45 = 0$
   $-(3x + 9)(5x - 5) = 0$
   $x = -3\ ,\ \ 1$

8. $27x^2 - 12x = -1$
   $27x^2 - 12x + 1 = 0$
   $(3x - 1)(9x - 1) = 0$
   $x = 1/3,\ \ 1/9$

9. $54x^2 - 21x - 1 = 2$
   $54x^2 - 21x - 3 = 0$
   $(6x - 3)(9x + 1) = 0$
   $x = 1/2,\ \ -1/9$

10. $8x^2 - 24x - 13 = 1$
    $8x^2 - 24x - 14 = 0$
    $(4x + 2)(2x - 7) = 0$
    $x = -1/2,\ \ 3\ 1/2$

11. $-6x^2 - 30x - 5 = 19$
    $-6x^2 - 30x - 24 = 0$
    $-(6x + 6)(x + 4) = 0$
    $x = -1\ ,\ \ -4$

12. $27x^2 - 102x + 15 = -48$
    $27x^2 - 102x + 63 = 0$
    $(9x - 7)(3x - 9) = 0$
    $x = 7/9,\ \ 3$

Résolution d'Équations Quadratiques (H)

Calculer les solutions des équations suivantes.

1. $-28x^2 + 50x - 2 = 16$

2. $-56x^2 - 13x + 3 = 0$

3. $-21x^2 + 23x + 15 = -5$

4. $20x^2 + 42x + 17 = -1$

5. $-40x^2 - 42x + 27 = -27$

6. $-32x^2 - 80x - 6 = 36$

7. $-30x^2 + 3x + 24 = -39$

8. $15x^2 - 4x - 1 = 2$

9. $5x^2 + 19x - 10 = 20$

10. $21x^2 + 66x = -48$

11. $-18x^2 + 13x - 1 = 1$

12. $6x^2 + 20x + 5 = -11$

Résolution d'Équations Quadratiques (H) Réponses

Calculer les solutions des équations suivantes.

1. $-28x^2 + 50x - 2 = 16$
   $-28x^2 + 50x - 18 = 0$
   $-(7x - 9)(4x - 2) = 0$
   $x = 1\ 2/7,\quad 1/2$

2. $-56x^2 - 13x + 3 = 0$
   $-56x^2 - 13x + 3 = 0$
   $(8x + 3)(7x - 1) = 0$
   $x = -3/8,\quad 1/7$

3. $-21x^2 + 23x + 15 = -5$
   $-21x^2 + 23x + 20 = 0$
   $(7x + 4)(3x - 5) = 0$
   $x = -4/7,\quad 1\ 2/3$

4. $20x^2 + 42x + 17 = -1$
   $20x^2 + 42x + 18 = 0$
   $(5x + 3)(4x + 6) = 0$
   $x = -3/5,\quad -1\ 1/2$

5. $-40x^2 - 42x + 27 = -27$
   $-40x^2 - 42x + 54 = 0$
   $(5x + 9)(8x - 6) = 0$
   $x = -1\ 4/5,\quad 3/4$

6. $-32x^2 - 80x - 6 = 36$
   $-32x^2 - 80x - 42 = 0$
   $(4x + 7)(8x + 6) = 0$
   $x = -1\ 3/4,\quad -3/4$

7. $-30x^2 + 3x + 24 = -39$
   $-30x^2 + 3x + 63 = 0$
   $-(6x - 9)(5x + 7) = 0$
   $x = 1\ 1/2,\quad -1\ 2/5$

8. $15x^2 - 4x - 1 = 2$
   $15x^2 - 4x - 3 = 0$
   $(3x + 1)(5x - 3) = 0$
   $x = -1/3,\quad 3/5$

9. $5x^2 + 19x - 10 = 20$
   $5x^2 + 19x - 30 = 0$
   $(5x - 6)(x + 5) = 0$
   $x = 1\ 1/5,\quad -5$

10. $21x^2 + 66x = -48$
    $21x^2 + 66x + 48 = 0$
    $(3x + 6)(7x + 8) = 0$
    $x = -2\ ,\quad -1\ 1/7$

11. $-18x^2 + 13x - 1 = 1$
    $-18x^2 + 13x - 2 = 0$
    $-(2x - 1)(9x - 2) = 0$
    $x = 1/2,\quad 2/9$

12. $6x^2 + 20x + 5 = -11$
    $6x^2 + 20x + 16 = 0$
    $(3x + 4)(2x + 4) = 0$
    $x = -1\ 1/3,\quad -2$

Résolution d'Équations Quadratiques (I)

Calculer les solutions des équations suivantes.

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

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

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

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

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

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

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

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

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

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

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

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

Résolution d'Équations Quadratiques (I) Réponses

Calculer les solutions des équations suivantes.

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

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

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

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

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

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

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

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

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

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

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

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

Résolution d'Équations Quadratiques (J)

Calculer les solutions des équations suivantes.

1. $18x^2 + 33x = -9$
2. $-24x^2 - 53x + 2 = -5$
3. $-32x^2 + 4x + 1 = 0$
4. $-14x^2 + 61x + 8 = -1$
5. $-6x^2 + 43x - 2 = 5$
6. $-6x^2 + 12x + 21 = -27$
7. $-45x^2 + 52x - 5 = 10$
8. $35x^2 - 26x - 8 = 40$
9. $45x^2 + 121x + 22 = -50$
10. $-2x^2 + 15x - 1 = 26$
11. $-4x^2 + 6x + 16 = -2$
12. $54x^2 - 12x - 1 = 1$

Résolution d'Équations Quadratiques (J) Réponses

Calculer les solutions des équations suivantes.

1. $18x^2 + 33x = -9$
   $18x^2 + 33x + 9 = 0$
   $(9x + 3)(2x + 3) = 0$
   $x = -1/3,\ -1\ 1/2$

2. $-24x^2 - 53x + 2 = -5$
   $-24x^2 - 53x + 7 = 0$
   $(3x + 7)(8x - 1) = 0$
   $x = -2\ 1/3,\ 1/8$

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

4. $-14x^2 + 61x + 8 = -1$
   $-14x^2 + 61x + 9 = 0$
   $-(2x - 9)(7x + 1) = 0$
   $x = 4\ 1/2,\ -1/7$

5. $-6x^2 + 43x - 2 = 5$
   $-6x^2 + 43x - 7 = 0$
   $(x - 7)(6x - 1) = 0$
   $x = 7,\ 1/6$

6. $-6x^2 + 12x + 21 = -27$
   $-6x^2 + 12x + 48 = 0$
   $(3x + 6)(2x - 8) = 0$
   $x = -2,\ 4$

7. $-45x^2 + 52x - 5 = 10$
   $-45x^2 + 52x - 15 = 0$
   $-(9x - 5)(5x - 3) = 0$
   $x = 5/9,\ 3/5$

8. $35x^2 - 26x - 8 = 40$
   $35x^2 - 26x - 48 = 0$
   $(7x + 6)(5x - 8) = 0$
   $x = -6/7,\ 1\ 3/5$

9. $45x^2 + 121x + 22 = -50$
   $45x^2 + 121x + 72 = 0$
   $(5x + 9)(9x + 8) = 0$
   $x = -1\ 4/5,\ -8/9$

10. $-2x^2 + 15x - 1 = 26$
    $-2x^2 + 15x - 27 = 0$
    $-(x - 3)(2x - 9) = 0$
    $x = 3,\ 4\ 1/2$

11. $-4x^2 + 6x + 16 = -2$
    $-4x^2 + 6x + 18 = 0$
    $-(2x - 6)(2x + 3) = 0$
    $x = 3,\ -1\ 1/2$

12. $54x^2 - 12x - 1 = 1$
    $54x^2 - 12x - 2 = 0$
    $(6x - 2)(9x + 1) = 0$
    $x = 1/3,\ -1/9$