

Résolution d'Équations Quadratiques (G)

Calculer les solutions des équations suivantes.

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

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

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

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

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

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

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

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

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

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

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

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

Résolution d'Équations Quadratiques (G) Réponses

Calculer les solutions des équations suivantes.

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

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

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

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

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

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

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

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

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

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

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

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