

Résolution d'Équations Quadratiques (A)

Calculer les solutions des équations suivantes.

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

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

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

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

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

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

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

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

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

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

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

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

Résolution d'Équations Quadratiques (A) Réponses

Calculer les solutions des équations suivantes.

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

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

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

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

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

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

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

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

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

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

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

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