

Résolution d'Équations Quadratiques (F)

Calculer les solutions des équations suivantes.

1. $45x^2 + 18x - 45 = 18$

7. $12x^2 + 28x - 4 = 20$

2. $12x^2 + 18x - 30 = 24$

8. $6x^2 - 39x + 44 = -1$

3. $28x^2 + 62x + 5 = -25$

9. $8x^2 - 36x + 36 = -4$

4. $6x^2 - 21x - 6 = 39$

10. $28x^2 + 37x + 8 = -4$

5. $56x^2 - 36x + 1 = -3$

11. $25x^2 + 80x + 1 = -62$

6. $64x^2 + 120x + 10 = -44$

12. $21x^2 + 30x + 2 = -7$

Résolution d'Équations Quadratiques (F) Réponses

Calculer les solutions des équations suivantes.

1. $45x^2 + 18x - 45 = 18$
 $45x^2 + 18x - 63 = 0$
 $(9x - 9)(5x + 7) = 0$
 $x = 1, -1 \frac{2}{5}$

7. $12x^2 + 28x - 4 = 20$
 $12x^2 + 28x - 24 = 0$
 $(2x + 6)(6x - 4) = 0$
 $x = -3, \frac{2}{3}$

2. $12x^2 + 18x - 30 = 24$
 $12x^2 + 18x - 54 = 0$
 $(6x - 9)(2x + 6) = 0$
 $x = 1 \frac{1}{2}, -3$

8. $6x^2 - 39x + 44 = -1$
 $6x^2 - 39x + 45 = 0$
 $(6x - 9)(x - 5) = 0$
 $x = 1 \frac{1}{2}, 5$

3. $28x^2 + 62x + 5 = -25$
 $28x^2 + 62x + 30 = 0$
 $(7x + 5)(4x + 6) = 0$
 $x = -\frac{5}{7}, -1 \frac{1}{2}$

9. $8x^2 - 36x + 36 = -4$
 $8x^2 - 36x + 40 = 0$
 $(4x - 8)(2x - 5) = 0$
 $x = 2, 2 \frac{1}{2}$

4. $6x^2 - 21x - 6 = 39$
 $6x^2 - 21x - 45 = 0$
 $(x - 5)(6x + 9) = 0$
 $x = 5, -1 \frac{1}{2}$

10. $28x^2 + 37x + 8 = -4$
 $28x^2 + 37x + 12 = 0$
 $(7x + 4)(4x + 3) = 0$
 $x = -\frac{4}{7}, -\frac{3}{4}$

5. $56x^2 - 36x + 1 = -3$
 $56x^2 - 36x + 4 = 0$
 $(7x - 1)(8x - 4) = 0$
 $x = \frac{1}{7}, \frac{1}{2}$

11. $25x^2 + 80x + 1 = -62$
 $25x^2 + 80x + 63 = 0$
 $(5x + 9)(5x + 7) = 0$
 $x = -1 \frac{4}{5}, -1 \frac{2}{5}$

6. $64x^2 + 120x + 10 = -44$
 $64x^2 + 120x + 54 = 0$
 $(8x + 9)(8x + 6) = 0$
 $x = -1 \frac{1}{8}, -\frac{3}{4}$

12. $21x^2 + 30x + 2 = -7$
 $21x^2 + 30x + 9 = 0$
 $(3x + 3)(7x + 3) = 0$
 $x = -1, -\frac{3}{7}$