

Résolution d'Équations Quadratiques (J)

Calculer les solutions des équations suivantes.

1. $32x^2 - 92x + 31 = -14$

7. $5x^2 + 20x - 5 = 20$

2. $9x^2 + 24x + 1 = -11$

8. $8x^2 - 24x + 11 = -5$

3. $16x^2 + 60x - 15 = 1$

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

4. $30x^2 + 52x + 10 = -6$

10. $9x^2 - 55x + 5 = -1$

5. $20x^2 - 46x + 13 = -11$

11. $36x^2 - 24x + 1 = -2$

6. $2x^2 + 7x - 17 = 13$

12. $4x^2 - 10x = -4$

Résolution d'Équations Quadratiques (J) Réponses

Calculer les solutions des équations suivantes.

1. $32x^2 - 92x + 31 = -14$
 $32x^2 - 92x + 45 = 0$
 $(4x - 9)(8x - 5) = 0$
 $x = 2 \frac{1}{4}, \frac{5}{8}$

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

2. $9x^2 + 24x + 1 = -11$
 $9x^2 + 24x + 12 = 0$
 $(3x + 2)(3x + 6) = 0$
 $x = -\frac{2}{3}, -2$

8. $8x^2 - 24x + 11 = -5$
 $8x^2 - 24x + 16 = 0$
 $(x - 2)(8x - 8) = 0$
 $x = 2, 1$

3. $16x^2 + 60x - 15 = 1$
 $16x^2 + 60x - 16 = 0$
 $(2x + 8)(8x - 2) = 0$
 $x = -4, \frac{1}{4}$

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

4. $30x^2 + 52x + 10 = -6$
 $30x^2 + 52x + 16 = 0$
 $(6x + 8)(5x + 2) = 0$
 $x = -1 \frac{1}{3}, -\frac{2}{5}$

10. $9x^2 - 55x + 5 = -1$
 $9x^2 - 55x + 6 = 0$
 $(9x - 1)(x - 6) = 0$
 $x = \frac{1}{9}, 6$

5. $20x^2 - 46x + 13 = -11$
 $20x^2 - 46x + 24 = 0$
 $(5x - 4)(4x - 6) = 0$
 $x = \frac{4}{5}, 1 \frac{1}{2}$

11. $36x^2 - 24x + 1 = -2$
 $36x^2 - 24x + 3 = 0$
 $(6x - 3)(6x - 1) = 0$
 $x = \frac{1}{2}, \frac{1}{6}$

6. $2x^2 + 7x - 17 = 13$
 $2x^2 + 7x - 30 = 0$
 $(x + 6)(2x - 5) = 0$
 $x = -6, 2 \frac{1}{2}$

12. $4x^2 - 10x = -4$
 $4x^2 - 10x + 4 = 0$
 $(4x - 2)(x - 2) = 0$
 $x = \frac{1}{2}, 2$