

Résolution d'Équations Quadratiques (J)

Calculer les solutions des équations suivantes.

$$1. \quad 18x^2 + 33x = -9$$

$$7. \quad -45x^2 + 52x - 5 = 10$$

$$2. \quad -24x^2 - 53x + 2 = -5$$

$$8. \quad 35x^2 - 26x - 8 = 40$$

$$3. \quad -32x^2 + 4x + 1 = 0$$

$$9. \quad 45x^2 + 121x + 22 = -50$$

$$4. \quad -14x^2 + 61x + 8 = -1$$

$$10. \quad -2x^2 + 15x - 1 = 26$$

$$5. \quad -6x^2 + 43x - 2 = 5$$

$$11. \quad -4x^2 + 6x + 16 = -2$$

$$6. \quad -6x^2 + 12x + 21 = -27$$

$$12. \quad 54x^2 - 12x - 1 = 1$$

Résolution d'Équations Quadratiques (J) Réponses

Calculer les solutions des équations suivantes.

1. $18x^2 + 33x = -9$

$18x^2 + 33x + 9 = 0$

$(9x + 3)(2x + 3) = 0$

$x = -1/3, -1\frac{1}{2}$

7. $-45x^2 + 52x - 5 = 10$

$-45x^2 + 52x - 15 = 0$

$-(9x - 5)(5x - 3) = 0$

$x = 5/9, 3/5$

2. $-24x^2 - 53x + 2 = -5$

$-24x^2 - 53x + 7 = 0$

$(3x + 7)(8x - 1) = 0$

$x = -2\frac{1}{3}, \frac{1}{8}$

8. $35x^2 - 26x - 8 = 40$

$35x^2 - 26x - 48 = 0$

$(7x + 6)(5x - 8) = 0$

$x = -6/7, 1\frac{3}{5}$

3. $-32x^2 + 4x + 1 = 0$

$-32x^2 + 4x + 1 = 0$

$(8x + 1)(4x - 1) = 0$

$x = -1/8, \frac{1}{4}$

9. $45x^2 + 121x + 22 = -50$

$45x^2 + 121x + 72 = 0$

$(5x + 9)(9x + 8) = 0$

$x = -1\frac{4}{5}, -8/9$

4. $-14x^2 + 61x + 8 = -1$

$-14x^2 + 61x + 9 = 0$

$-(2x - 9)(7x + 1) = 0$

$x = 4\frac{1}{2}, -1/7$

10. $-2x^2 + 15x - 1 = 26$

$-2x^2 + 15x - 27 = 0$

$-(x - 3)(2x - 9) = 0$

$x = 3, 4\frac{1}{2}$

5. $-6x^2 + 43x - 2 = 5$

$-6x^2 + 43x - 7 = 0$

$(x - 7)(6x - 1) = 0$

$x = 7, 1/6$

11. $-4x^2 + 6x + 16 = -2$

$-4x^2 + 6x + 18 = 0$

$-(2x - 6)(2x + 3) = 0$

$x = 3, -1\frac{1}{2}$

6. $-6x^2 + 12x + 21 = -27$

$-6x^2 + 12x + 48 = 0$

$(3x + 6)(2x - 8) = 0$

$x = -2, 4$

12. $54x^2 - 12x - 1 = 1$

$54x^2 - 12x - 2 = 0$

$(6x - 2)(9x + 1) = 0$

$x = 1/3, -1/9$