

Résolution d'Équations Quadratiques (E)

Calculer les solutions des équations suivantes.

$$1. \quad -2x^2 - 13x + 7 = 0$$

$$7. \quad 2x^2 - 7x - 47 = 2$$

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

$$8. \quad 4x^2 - 2x - 11 = 1$$

$$3. \quad -x^2 - 6x - 1 = 4$$

$$9. \quad -x^2 - 10x - 1 = 20$$

$$4. \quad -2x^2 + x + 13 = -32$$

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

$$5. \quad -4x^2 + 24x - 19 = 16$$

$$11. \quad 2x^2 + 4x - 1 = 15$$

$$6. \quad -2x^2 + 23x - 33 = 12$$

$$12. \quad 2x^2 - 11x + 7 = -2$$

Résolution d'Équations Quadratiques (E) Réponses

Calculer les solutions des équations suivantes.

$$\begin{aligned} 1. \quad & -2x^2 - 13x + 7 = 0 \\ & -2x^2 - 13x + 7 = 0 \\ & -(x + 7)(2x - 1) = 0 \\ & x = -7, \quad 1/2 \end{aligned}$$

$$\begin{aligned} 7. \quad & 2x^2 - 7x - 47 = 2 \\ & 2x^2 - 7x - 49 = 0 \\ & (x - 7)(2x + 7) = 0 \\ & x = 7, \quad -3 \frac{1}{2} \end{aligned}$$

$$\begin{aligned} 2. \quad & -2x^2 + 8x - 4 = 2 \\ & -2x^2 + 8x - 6 = 0 \\ & (2x - 6)(x - 1) = 0 \\ & x = 3, \quad 1 \end{aligned}$$

$$\begin{aligned} 8. \quad & 4x^2 - 2x - 11 = 1 \\ & 4x^2 - 2x - 12 = 0 \\ & (2x + 3)(2x - 4) = 0 \\ & x = -1 \frac{1}{2}, \quad 2 \end{aligned}$$

$$\begin{aligned} 3. \quad & -x^2 - 6x - 1 = 4 \\ & -x^2 - 6x - 5 = 0 \\ & (x + 1)(x + 5) = 0 \\ & x = -1, \quad -5 \end{aligned}$$

$$\begin{aligned} 9. \quad & -x^2 - 10x - 1 = 20 \\ & -x^2 - 10x - 21 = 0 \\ & -(x + 7)(x + 3) = 0 \\ & x = -7, \quad -3 \end{aligned}$$

$$\begin{aligned} 4. \quad & -2x^2 + x + 13 = -32 \\ & -2x^2 + x + 45 = 0 \\ & -(2x + 9)(x - 5) = 0 \\ & x = -4 \frac{1}{2}, \quad 5 \end{aligned}$$

$$\begin{aligned} 10. \quad & -x^2 + 5x - 2 = 2 \\ & -x^2 + 5x - 4 = 0 \\ & -(x - 1)(x - 4) = 0 \\ & x = 1, \quad 4 \end{aligned}$$

$$\begin{aligned} 5. \quad & -4x^2 + 24x - 19 = 16 \\ & -4x^2 + 24x - 35 = 0 \\ & (2x - 5)(2x - 7) = 0 \\ & x = 2 \frac{1}{2}, \quad 3 \frac{1}{2} \end{aligned}$$

$$\begin{aligned} 11. \quad & 2x^2 + 4x - 1 = 15 \\ & 2x^2 + 4x - 16 = 0 \\ & (2x + 8)(x - 2) = 0 \\ & x = -4, \quad 2 \end{aligned}$$

$$\begin{aligned} 6. \quad & -2x^2 + 23x - 33 = 12 \\ & -2x^2 + 23x - 45 = 0 \\ & (2x - 5)(x - 9) = 0 \\ & x = 2 \frac{1}{2}, \quad 9 \end{aligned}$$

$$\begin{aligned} 12. \quad & 2x^2 - 11x + 7 = -2 \\ & 2x^2 - 11x + 9 = 0 \\ & (x - 1)(2x - 9) = 0 \\ & x = 1, \quad 4 \frac{1}{2} \end{aligned}$$