

Résolution d'Équations Quadratiques (I)

Calculer les solutions des équations suivantes.

$$1. \quad 2x^2 + 14x + 2 = -18$$

$$7. \quad 4x^2 + 8x - 16 = 29$$

$$2. \quad x^2 + x - 1 = 5$$

$$8. \quad x^2 + 4x + 3 = -1$$

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

$$9. \quad 2x^2 + 5x - 12 = 13$$

$$4. \quad 2x^2 + 17x + 4 = -4$$

$$10. \quad 2x^2 - 3x - 3 = 6$$

$$5. \quad 2x^2 + 18x + 28 = -12$$

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

$$6. \quad 2x^2 + 14x + 24 = 0$$

$$12. \quad 4x^2 - 6x + 1 = -1$$

Résolution d'Équations Quadratiques (I) Réponses

Calculer les solutions des équations suivantes.

1. $2x^2 + 14x + 2 = -18$
 $2x^2 + 14x + 20 = 0$
 $(2x + 4)(x + 5) = 0$
 $x = -2, -5$

7. $4x^2 + 8x - 16 = 29$
 $4x^2 + 8x - 45 = 0$
 $(2x - 5)(2x + 9) = 0$
 $x = 2 \frac{1}{2}, -4 \frac{1}{2}$

2. $x^2 + x - 1 = 5$
 $x^2 + x - 6 = 0$
 $(x - 2)(x + 3) = 0$
 $x = 2, -3$

8. $x^2 + 4x + 3 = -1$
 $x^2 + 4x + 4 = 0$
 $(x + 2)(x + 2) = 0$
 $x = -2$

3. $2x^2 + 4x - 4 = 2$
 $2x^2 + 4x - 6 = 0$
 $(2x - 2)(x + 3) = 0$
 $x = 1, -3$

9. $2x^2 + 5x - 12 = 13$
 $2x^2 + 5x - 25 = 0$
 $(x + 5)(2x - 5) = 0$
 $x = -5, 2 \frac{1}{2}$

4. $2x^2 + 17x + 4 = -4$
 $2x^2 + 17x + 8 = 0$
 $(x + 8)(2x + 1) = 0$
 $x = -8, -\frac{1}{2}$

10. $2x^2 - 3x - 3 = 6$
 $2x^2 - 3x - 9 = 0$
 $(2x + 3)(x - 3) = 0$
 $x = -1 \frac{1}{2}, 3$

5. $2x^2 + 18x + 28 = -12$
 $2x^2 + 18x + 40 = 0$
 $(2x + 8)(x + 5) = 0$
 $x = -4, -5$

11. $x^2 + 2x = -1$
 $x^2 + 2x + 1 = 0$
 $(x + 1)(x + 1) = 0$
 $x = -1$

6. $2x^2 + 14x + 24 = 0$
 $2x^2 + 14x + 24 = 0$
 $(2x + 6)(x + 4) = 0$
 $x = -3, -4$

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