

Résolution d'Équations Quadratiques (B)

Calculer les solutions des équations suivantes.

$$1. \quad 2x^2 + 24x + 28 = -26$$

$$7. \quad x^2 - 12x + 7 = -20$$

$$2. \quad 2x^2 + 10x = -8$$

$$8. \quad 2x^2 + 23x + 17 = -39$$

$$3. \quad x^2 + 13x + 8 = -32$$

$$9. \quad 4x^2 - 2x - 54 = 2$$

$$4. \quad x^2 + 12x + 10 = -17$$

$$10. \quad 4x^2 + 14x - 4 = 4$$

$$5. \quad 2x^2 + 23x + 21 = -42$$

$$11. \quad x^2 + 7x + 11 = -1$$

$$6. \quad 2x^2 - 15x + 20 = -8$$

$$12. \quad x^2 + 6x - 4 = 3$$

Résolution d'Équations Quadratiques (B) Réponses

Calculer les solutions des équations suivantes.

1. $2x^2 + 24x + 28 = -26$
 $2x^2 + 24x + 54 = 0$
 $(x + 9)(2x + 6) = 0$
 $x = -9, -3$

7. $x^2 - 12x + 7 = -20$
 $x^2 - 12x + 27 = 0$
 $(x - 9)(x - 3) = 0$
 $x = 9, 3$

2. $2x^2 + 10x = -8$
 $2x^2 + 10x + 8 = 0$
 $(2x + 8)(x + 1) = 0$
 $x = -4, -1$

8. $2x^2 + 23x + 17 = -39$
 $2x^2 + 23x + 56 = 0$
 $(2x + 7)(x + 8) = 0$
 $x = -3 \frac{1}{2}, -8$

3. $x^2 + 13x + 8 = -32$
 $x^2 + 13x + 40 = 0$
 $(x + 8)(x + 5) = 0$
 $x = -8, -5$

9. $4x^2 - 2x - 54 = 2$
 $4x^2 - 2x - 56 = 0$
 $(2x + 7)(2x - 8) = 0$
 $x = -3 \frac{1}{2}, 4$

4. $x^2 + 12x + 10 = -17$
 $x^2 + 12x + 27 = 0$
 $(x + 3)(x + 9) = 0$
 $x = -3, -9$

10. $4x^2 + 14x - 4 = 4$
 $4x^2 + 14x - 8 = 0$
 $(2x - 1)(2x + 8) = 0$
 $x = \frac{1}{2}, -4$

5. $2x^2 + 23x + 21 = -42$
 $2x^2 + 23x + 63 = 0$
 $(x + 7)(2x + 9) = 0$
 $x = -7, -4 \frac{1}{2}$

11. $x^2 + 7x + 11 = -1$
 $x^2 + 7x + 12 = 0$
 $(x + 3)(x + 4) = 0$
 $x = -3, -4$

6. $2x^2 - 15x + 20 = -8$
 $2x^2 - 15x + 28 = 0$
 $(x - 4)(2x - 7) = 0$
 $x = 4, 3 \frac{1}{2}$

12. $x^2 + 6x - 4 = 3$
 $x^2 + 6x - 7 = 0$
 $(x - 1)(x + 7) = 0$
 $x = 1, -7$