

Résolution d'Équations Quadratiques (E)

Calculer les solutions des équations suivantes.

$$1. \quad 72x^2 - 40x - 25 = 7$$

$$7. \quad 9x^2 - 14 = 11$$

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

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

$$3. \quad 10x^2 - 31x + 20 = -4$$

$$9. \quad 54x^2 + 18x - 7 = 29$$

$$4. \quad 27x^2 + 45x + 5 = -13$$

$$10. \quad 21x^2 + 23x + 5 = -1$$

$$5. \quad 6x^2 + 42x + 30 = -6$$

$$11. \quad 28x^2 + 65x + 15 = -13$$

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

$$12. \quad 45x^2 + 62x + 15 = -6$$

Résolution d'Équations Quadratiques (E) Réponses

Calculer les solutions des équations suivantes.

1. $72x^2 - 40x - 25 = 7$
 $72x^2 - 40x - 32 = 0$
 $(8x - 8)(9x + 4) = 0$
 $x = 1, -4/9$

7. $9x^2 - 14 = 11$
 $9x^2 - 25 = 0$
 $(3x - 5)(3x + 5) = 0$
 $x = 1\frac{2}{3}, -1\frac{2}{3}$

2. $2x^2 + 2x - 7 = 5$
 $2x^2 + 2x - 12 = 0$
 $(2x + 6)(x - 2) = 0$
 $x = -3, 2$

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

3. $10x^2 - 31x + 20 = -4$
 $10x^2 - 31x + 24 = 0$
 $(2x - 3)(5x - 8) = 0$
 $x = 1\frac{1}{2}, 1\frac{3}{5}$

9. $54x^2 + 18x - 7 = 29$
 $54x^2 + 18x - 36 = 0$
 $(9x - 6)(6x + 6) = 0$
 $x = 2/3, -1$

4. $27x^2 + 45x + 5 = -13$
 $27x^2 + 45x + 18 = 0$
 $(9x + 9)(3x + 2) = 0$
 $x = -1, -2/3$

10. $21x^2 + 23x + 5 = -1$
 $21x^2 + 23x + 6 = 0$
 $(3x + 2)(7x + 3) = 0$
 $x = -2/3, -3/7$

5. $6x^2 + 42x + 30 = -6$
 $6x^2 + 42x + 36 = 0$
 $(6x + 6)(x + 6) = 0$
 $x = -1, -6$

11. $28x^2 + 65x + 15 = -13$
 $28x^2 + 65x + 28 = 0$
 $(4x + 7)(7x + 4) = 0$
 $x = -1\frac{3}{4}, -4/7$

6. $10x^2 - 2x - 10 = 2$
 $10x^2 - 2x - 12 = 0$
 $(5x - 6)(2x + 2) = 0$
 $x = 1\frac{1}{5}, -1$

12. $45x^2 + 62x + 15 = -6$
 $45x^2 + 62x + 21 = 0$
 $(9x + 7)(5x + 3) = 0$
 $x = -7/9, -3/5$