Résolution d'Équations Quadratiques (D)

Calculer les solutions des équations suivantes.

1. $x^2 + 14x + 2 = -43$

2. $4x^2 + 26x + 23 = -17$

3. $2x^2 - 12x - 44 = 10$

4. $2x^2 - 11x + 2 = -13$

5. $4x^2 - 12x - 4 = 3$

6. $2x^2 + 7x - 1 = 3$

7. $4x^2 - 1 = 0$

8. $x^2 + 5x + 3 = -3$

9. $2x^2 - 9x + 6 = -1$

10. $x^2 + 4x - 19 = 2$

11. $4x^2 - 14x - 6 = 12$

12. $4x^2 - 6x = -2$

Résolution d'Équations Quadratiques (D) Réponses

Calculer les solutions des équations suivantes.

1. $x^2 + 14x + 2 = -43$
   $x^2 + 14x + 45 = 0$
   $(x + 9)(x + 5) = 0$
   $x = -9\ ,\ -5$

2. $4x^2 + 26x + 23 = -17$
   $4x^2 + 26x + 40 = 0$
   $(2x + 8)(2x + 5) = 0$
   $x = -4\ ,\ -2\ 1/2$

3. $2x^2 - 12x - 44 = 10$
   $2x^2 - 12x - 54 = 0$
   $(x - 9)(2x + 6) = 0$
   $x = 9\ ,\ -3$

4. $2x^2 - 11x + 2 = -13$
   $2x^2 - 11x + 15 = 0$
   $(2x - 5)(x - 3) = 0$
   $x = 2\ 1/2,\ 3$

5. $4x^2 - 12x - 4 = 3$
   $4x^2 - 12x - 7 = 0$
   $(2x - 7)(2x + 1) = 0$
   $x = 3\ 1/2,\ -1/2$

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

7. $4x^2 - 1 = 0$
   $4x^2 - 1 = 0$
   $(2x + 1)(2x - 1) = 0$
   $x = -1/2,\ 1/2$

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

9. $2x^2 - 9x + 6 = -1$
   $2x^2 - 9x + 7 = 0$
   $(x - 1)(2x - 7) = 0$
   $x = 1\ ,\ 3\ 1/2$

10. $x^2 + 4x - 19 = 2$
    $x^2 + 4x - 21 = 0$
    $(x + 7)(x - 3) = 0$
    $x = -7\ ,\ 3$

11. $4x^2 - 14x - 6 = 12$
    $4x^2 - 14x - 18 = 0$
    $(2x + 2)(2x - 9) = 0$
    $x = -1\ ,\ 4\ 1/2$

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