Résolution d'Équations Quadratiques (I)

Calculer les solutions des équations suivantes.

1. $12x^2 - 31x + 6 = -1$

7. $10x^2 + 52x + 16 = -32$

2. $9x^2 - 6x + 1 = 0$

8. $16x^2 - 66x - 19 = 8$

3. $72x^2 - 11x - 17 = 18$

9. $48x^2 + 34x - 1 = 4$

4. $40x^2 + 112x + 10 = -62$

10. $32x^2 - 16x + 1 = -1$

5. $4x^2 - 11x + 4 = -3$

11. $63x^2 - 91x + 15 = -13$

6. $21x^2 - 10x - 15 = 9$

12. $30x^2 - 4x - 1 = 1$

Résolution d'Équations Quadratiques (I) Réponses

Calculer les solutions des équations suivantes.

1. $12x^2 - 31x + 6 = -1$
    $12x^2 - 31x + 7 = 0$
    $(3x - 7)(4x - 1) = 0$
    $x = 2\ 1/3,\quad 1/4$

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

3. $72x^2 - 11x - 17 = 18$
    $72x^2 - 11x - 35 = 0$
    $(9x - 7)(8x + 5) = 0$
    $x = 7/9,\ - 5/8$

4. $40x^2 + 112x + 10 = -62$
    $40x^2 + 112x + 72 = 0$
    $(8x + 8)(5x + 9) = 0$
    $x = -1\ ,\ -1\ 4/5$

5. $4x^2 - 11x + 4 = -3$
    $4x^2 - 11x + 7 = 0$
    $(4x - 7)(x - 1) = 0$
    $x = 1\ 3/4,\ 1$

6. $21x^2 - 10x - 15 = 9$
    $21x^2 - 10x - 24 = 0$
    $(7x + 6)(3x - 4) = 0$
    $x = - 6/7,\ 1\ 1/3$

7. $10x^2 + 52x + 16 = -32$
    $10x^2 + 52x + 48 = 0$
    $(5x + 6)(2x + 8) = 0$
    $x = -1\ 1/5,\ -4$

8. $16x^2 - 66x - 19 = 8$
    $16x^2 - 66x - 27 = 0$
    $(8x + 3)(2x - 9) = 0$
    $x = - 3/8,\ 4\ 1/2$

9. $48x^2 + 34x - 1 = 4$
    $48x^2 + 34x - 5 = 0$
    $(6x + 5)(8x - 1) = 0$
    $x = - 5/6,\ 1/8$

10. $32x^2 - 16x + 1 = -1$
    $32x^2 - 16x + 2 = 0$
    $(4x - 1)(8x - 2) = 0$
    $x = 1/4$

11. $63x^2 - 91x + 15 = -13$
    $63x^2 - 91x + 28 = 0$
    $(7x - 7)(9x - 4) = 0$
    $x = 1\ ,\ 4/9$

12. $30x^2 - 4x - 1 = 1$
    $30x^2 - 4x - 2 = 0$
    $(5x + 1)(6x - 2) = 0$
    $x = - 1/5,\ 1/3$