Résolution d'Équations Quadratiques (I)

Calculer les solutions des équations suivantes.

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

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

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

4. $2x^2 + 9x - 45 = 36$

5. $-x^2 - 4x + 4 = -1$

6. $2x^2 + 3x - 5 = 9$

7. $4x^2 + 8x - 2 = 3$

8. $x^2 + 2x - 45 = 18$

9. $-2x^2 + 11x - 12 = 2$

10. $-2x^2 - x + 1 = 0$

11. $-4x^2 - 26x - 37 = 5$

12. $-2x^2 - 5x + 7 = -11$

Calculer les solutions des équations suivantes.

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

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

3. $-2x^2 - 12x - 4 = 12$
   $-2x^2 - 12x - 16 = 0$
   $(2x + 4)(x + 4) = 0$
   $x = -2$, -4

4. $2x^2 + 9x - 45 = 36$
   $2x^2 + 9x - 81 = 0$
   $(x + 9)(2x - 9) = 0$
   $x = -9$, $4\ 1/2$

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

6. $2x^2 + 3x - 5 = 9$
   $2x^2 + 3x - 14 = 0$
   $(x - 2)(2x + 7) = 0$
   $x = 2$, $-3\ 1/2$

7. $4x^2 + 8x - 2 = 3$
   $4x^2 + 8x - 5 = 0$
   $(2x - 1)(2x + 5) = 0$
   $x = 1/2$, $-2\ 1/2$

8. $x^2 + 2x - 45 = 18$
   $x^2 + 2x - 63 = 0$
   $(x - 7)(x + 9) = 0$
   $x = 7$, -9

9. $-2x^2 + 11x - 12 = 2$
   $-2x^2 + 11x - 14 = 0$
   $-(x - 2)(2x - 7) = 0$
   $x = 2$, $3\ 1/2$

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

11. $-4x^2 - 26x - 37 = 5$
    $-4x^2 - 26x - 42 = 0$
    $-(2x + 7)(2x + 6) = 0$
    $x = -3\ 1/2$, -3

12. $-2x^2 - 5x + 7 = -11$
    $-2x^2 - 5x + 18 = 0$
    $-(x - 2)(2x + 9) = 0$
    $x = 2$, $-4\ 1/2$