Résolution d'Équations Quadratiques (E)

Calculer les solutions des équations suivantes.

1. $8x^2 - 15 = 17$

2. $63x^2 - 60x - 5 = 22$

3. $-5x^2 - 25x - 7 = 13$

4. $24x^2 + 52x = -24$

5. $24x^2 + 60x + 20 = -16$

6. $5x^2 + 11x - 26 = 10$

7. $-30x^2 + 59x - 7 = 21$

8. $-28x^2 - 43x + 16 = -29$

9. $-9x^2 + 51x - 6 = 24$

10. $30x^2 + 23x - 9 = 5$

11. $30x^2 - 65x + 14 = -21$

12. $-24x^2 - 24x + 22 = -26$

Résolution d'Équations Quadratiques (E) Réponses

Calculer les solutions des équations suivantes.

1. $8x^2 - 15 = 17$
   $8x^2 - 32 = 0$
   $(2x - 4)(4x + 8) = 0$
   $x = 2$, -2

7. $-30x^2 + 59x - 7 = 21$
   $-30x^2 + 59x - 28 = 0$
   $-(6x - 7)(5x - 4) = 0$
   $x = 1\ 1/6$, $4/5$

2. $63x^2 - 60x - 5 = 22$
   $63x^2 - 60x - 27 = 0$
   $(7x - 9)(9x + 3) = 0$
   $x = 1\ 2/7$, $-1/3$

8. $-28x^2 - 43x + 16 = -29$
   $-28x^2 - 43x + 45 = 0$
   $-(4x + 9)(7x - 5) = 0$
   $x = -2\ 1/4$, $5/7$

3. $-5x^2 - 25x - 7 = 13$
   $-5x^2 - 25x - 20 = 0$
   $(5x + 5)(x + 4) = 0$
   $x = -1$, -4

9. $-9x^2 + 51x - 6 = 24$
   $-9x^2 + 51x - 30 = 0$
   $-(x - 5)(9x - 6) = 0$
   $x = 5$, $2/3$

4. $24x^2 + 52x = -24$
   $24x^2 + 52x + 24 = 0$
   $(6x + 4)(4x + 6) = 0$
   $x = -2/3$, $-1\ 1/2$

10. $30x^2 + 23x - 9 = 5$
    $30x^2 + 23x - 14 = 0$
    $(5x - 2)(6x + 7) = 0$
    $x = 2/5$, $-1\ 1/6$

5. $24x^2 + 60x + 20 = -16$
   $24x^2 + 60x + 36 = 0$
   $(4x + 6)(6x + 6) = 0$
   $x = -1\ 1/2$, -1

11. $30x^2 - 65x + 14 = -21$
    $30x^2 - 65x + 35 = 0$
    $(6x - 7)(5x - 5) = 0$
    $x = 1\ 1/6$, 1

6. $5x^2 + 11x - 26 = 10$
   $5x^2 + 11x - 36 = 0$
   $(x + 4)(5x - 9) = 0$
   $x = -4$, $1\ 4/5$

12. $-24x^2 - 24x + 22 = -26$
    $-24x^2 - 24x + 48 = 0$
    $-(6x - 6)(4x + 8) = 0$
    $x = 1$, -2