Résolution d'Équations Quadratiques (H)

Calculer les solutions des équations suivantes.

1. $72x^2 + 100x + 2 = -30$

2. $15x^2 + 8x - 42 = 21$

3. $48x^2 + 48x + 6 = -6$

4. $48x^2 + 24x - 31 = 41$

5. $4x^2 + 33x - 11 = 16$

6. $27x^2 - 36x - 26 = 10$

7. $6x^2 - 10x - 3 = 1$

8. $21x^2 + 18x - 1 = 2$

9. $9x^2 + 39x + 8 = -4$

10. $21x^2 - 17x - 5 = 3$

11. $27x^2 - 45x - 2 = 40$

12. $2x^2 + 12x + 8 = -2$

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Résolution d'Équations Quadratiques (H) Réponses

Calculer les solutions des équations suivantes.

1. $72x^2 + 100x + 2 = -30$
$72x^2 + 100x + 32 = 0$
$(9x + 8)(8x + 4) = 0$
$x = -8/9, -1/2$

2. $15x^2 + 8x - 42 = 21$
$15x^2 + 8x - 63 = 0$
$(3x + 7)(5x - 9) = 0$
$x = -2\ 1/3, 1\ 4/5$

3. $48x^2 + 48x + 6 = -6$
$48x^2 + 48x + 12 = 0$
$(6x + 3)(8x + 4) = 0$
$x = -1/2$

4. $48x^2 + 24x - 31 = 41$
$48x^2 + 24x - 72 = 0$
$(6x + 9)(8x - 8) = 0$
$x = -1\ 1/2, 1$

5. $4x^2 + 33x - 11 = 16$
$4x^2 + 33x - 27 = 0$
$(x + 9)(4x - 3) = 0$
$x = -9, 3/4$

6. $27x^2 - 36x - 26 = 10$
$27x^2 - 36x - 36 = 0$
$(9x + 6)(3x - 6) = 0$
$x = -2/3, 2$

7. $6x^2 - 10x - 3 = 1$
$6x^2 - 10x - 4 = 0$
$(6x + 2)(x - 2) = 0$
$x = -1/3, 2$

8. $21x^2 + 18x - 1 = 2$
$21x^2 + 18x - 3 = 0$
$(3x + 3)(7x - 1) = 0$
$x = -1, 1/7$

9. $9x^2 + 39x + 8 = -4$
$9x^2 + 39x + 12 = 0$
$(9x + 3)(x + 4) = 0$
$x = -1/3, -4$

10. $21x^2 - 17x - 5 = 3$
$21x^2 - 17x - 8 = 0$
$(3x + 1)(7x - 8) = 0$
$x = -1/3, 1\ 1/7$

11. $27x^2 - 45x - 2 = 40$
$27x^2 - 45x - 42 = 0$
$(3x - 7)(9x + 6) = 0$
$x = 2\ 1/3, -2/3$

12. $2x^2 + 12x + 8 = -2$
$2x^2 + 12x + 10 = 0$
$(x + 5)(2x + 2) = 0$
$x = -5, -1$