

Résolution d'Équations Quadratiques (D)

Calculer les solutions des équations suivantes.

1. $-18x^2 + 30x - 6 = 2$

7. $8x^2 - 36x - 11 = 9$

2. $-18x^2 + 48x - 13 = 11$

8. $-6x^2 + 24x + 8 = -22$

3. $-15x^2 - 40x - 23 = 2$

9. $20x^2 + 36x - 7 = 1$

4. $3x^2 - 28x + 6 = -26$

10. $14x^2 - 23x - 20 = 10$

5. $-28x^2 + 13x = -5$

11. $40x^2 - 49x - 2 = 22$

6. $36x^2 + 5x - 1 = 0$

12. $-40x^2 - 38x - 5 = 1$

Résolution d'Équations Quadratiques (D) Réponses

Calculer les solutions des équations suivantes.

1. $-18x^2 + 30x - 6 = 2$
 $-18x^2 + 30x - 8 = 0$
 $-(6x - 8)(3x - 1) = 0$
 $x = 1 \frac{1}{3}, \frac{1}{3}$

2. $-18x^2 + 48x - 13 = 11$
 $-18x^2 + 48x - 24 = 0$
 $(9x - 6)(2x - 4) = 0$
 $x = \frac{2}{3}, 2$

3. $-15x^2 - 40x - 23 = 2$
 $-15x^2 - 40x - 25 = 0$
 $(3x + 5)(5x + 5) = 0$
 $x = -1 \frac{2}{3}, -1$

4. $3x^2 - 28x + 6 = -26$
 $3x^2 - 28x + 32 = 0$
 $(x - 8)(3x - 4) = 0$
 $x = 8, 1 \frac{1}{3}$

5. $-28x^2 + 13x = -5$
 $-28x^2 + 13x + 5 = 0$
 $(4x + 1)(7x - 5) = 0$
 $x = -\frac{1}{4}, \frac{5}{7}$

6. $36x^2 + 5x - 1 = 0$
 $36x^2 + 5x - 1 = 0$
 $(4x + 1)(9x - 1) = 0$
 $x = -\frac{1}{4}, \frac{1}{9}$

7. $8x^2 - 36x - 11 = 9$
 $8x^2 - 36x - 20 = 0$
 $(8x + 4)(x - 5) = 0$
 $x = -\frac{1}{2}, 5$

8. $-6x^2 + 24x + 8 = -22$
 $-6x^2 + 24x + 30 = 0$
 $-(6x + 6)(x - 5) = 0$
 $x = -1, 5$

9. $20x^2 + 36x - 7 = 1$
 $20x^2 + 36x - 8 = 0$
 $(4x + 8)(5x - 1) = 0$
 $x = -2, \frac{1}{5}$

10. $14x^2 - 23x - 20 = 10$
 $14x^2 - 23x - 30 = 0$
 $(2x - 5)(7x + 6) = 0$
 $x = 2 \frac{1}{2}, -\frac{6}{7}$

11. $40x^2 - 49x - 2 = 22$
 $40x^2 - 49x - 24 = 0$
 $(8x + 3)(5x - 8) = 0$
 $x = -\frac{3}{8}, 1 \frac{3}{5}$

12. $-40x^2 - 38x - 5 = 1$
 $-40x^2 - 38x - 6 = 0$
 $-(8x + 6)(5x + 1) = 0$
 $x = -\frac{3}{4}, -\frac{1}{5}$