

Intermediate Algebra Skill

Solving Quadratic Equations by Quadratic Formula

Solve using the quadratic formula:

1. $x^2 + 7x + 4 = 0$

2. $3p^2 = -8p - 5$

3. $x^2 - x + 2 = 0$

4. $x^2 + 13 = 6x$

5. $h^2 + 4 = 6h$

6. $3 + \frac{8}{x} = \frac{1}{x^2}$

7. $x + \frac{1}{x} = \frac{13}{6}$

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

9. $14x^2 + 9x = 0$

10. $25x^2 - 20x + 4 = 0$

11. $5x^2 = 13x + 17$

12. $x^2 + 9 = 4x$

13. $7x(x + 2) + 6 = 3x(x + 1)$

14. $14(x - 4) - (x + 2) = (x + 2)(x - 4)$

Answers to Solving Quadratic Equations by Quadratic Formula:

1. $\frac{-7 \pm \sqrt{33}}{2}$

2. $\frac{-5}{3}, -1$

3. $\frac{1 \pm i\sqrt{7}}{2}$

4. $3 \pm 2i$

5. $3 \pm \sqrt{5}$

6. $\frac{-4 \pm \sqrt{19}}{3}$

7. $\frac{2}{3}, \frac{3}{2}$

8. $-1, 0$

9. $\frac{-9}{14}, 0$

10. $\frac{2}{5}$

11. $\frac{13 \pm \sqrt{509}}{10}$

12. $2 \pm i\sqrt{5}$

13. $-2, \frac{-3}{4}$

14. $5, 10$