

Using Quadratic Formula

II. Practice solving quadratics with the quadratic formula over the set of Complex numbers.

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

2. $x^2 + 6x + 13 = 0$

3. $x^2 + 6x + 12 = 0$

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

5. $a^2 - 5a + 8 = 0$

6. $x^2 - 3x + 10 = 0$

7. $b^2 - 7b - 3 = 0$

8. $-x^2 + 5x - 6 = 0$

9. $-c^2 - 6c + 8 = 0$

10. $2a^2 - 6a - 3 = 0$

11. $3d^2 - 5d + 6 = 0$

12. $4x^2 + 11x = 3x - 10$

13. $14 - 3a^2 = 2a$

14. $7 - 8z^2 = 6z + 16$

IV. Answer Key

1. $x = 2 \pm i$

2. $x = -3 \pm 2i$

3. $x = -3 \pm i\sqrt{3}$

4. $x = -2 \pm \sqrt{2}$

5. $a = \frac{5 \pm i\sqrt{7}}{2}$

6. $x = \frac{3 \pm i\sqrt{31}}{2}$

7. $b = \frac{7 \pm \sqrt{61}}{2}$

8. $x = 2, 3$

9. $c = -3 \pm \sqrt{17}$

10. $a = \frac{3 \pm \sqrt{15}}{2}$

11. $d = \frac{5 \pm i\sqrt{47}}{6}$

12. $x = \frac{-2 \pm i\sqrt{6}}{2}$

13. $a = \frac{1 \pm \sqrt{43}}{3}$

14. $z = \frac{-3 \pm 3\sqrt{7}}{8}$