

1. $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

2. discriminant

3. There will be two imaginary solutions.

4. the Quadratic Formula and completing the square; Complete the square when $a = 1$ and b is an even number; Use the Quadratic Formula when $a \neq 1$, or b is an odd number.

5. $x = 3$ and $x = 1$

6. $x = -1$

7. $x = -3 \pm i\sqrt{6}$

8. $x = \frac{1 \pm i\sqrt{5}}{6}$

9. $x = 7$

10. $x = 3$ and $x = -5$

11. $x = \frac{-1 \pm i\sqrt{14}}{3}$

12. $x = \frac{-3 \pm \sqrt{41}}{4}$

13. $x = 5$

14. $x = \frac{2 \pm i\sqrt{26}}{5}$

15. $x = \frac{3 \pm \sqrt{89}}{8}$

16. $x = -11$

17. $z = 6 \pm \sqrt{30}$

18. $w = \frac{7 \pm i\sqrt{47}}{8}$

59. $x = 6$

60. $x \approx 3.51$