



THE QUADRATIC FORMULA

Quadratic Theorem

- For any quadratic equation in the form $ax^2+bx+c = 0$, where $a \neq 0$, the two solutions are:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$


Note: one solution is positive and one is negative



Steps

1. Write equation in the form $ax^2 + bx + c = 0$
2. Identify a , b , and c
3. Plug into quadratic formula
4. Simplify.

*Remember you should have two solutions when finished.





Examples

1. $X^2 - 9X + 20 = 0$

2. $6x^2 = -5x + 4$

3. $2x^3 + 11x^2 + 12x = 0$

4. $3x^2 + 6x - 2 = 0$

