

Solving Quadratic Functions Graphic Organizer**Factoring Method**

This is the Fastest method only when the quadratic is easily factorable.

Example: $3x^2 + 10x - 8 = 0$

Do on back: $x^2 - 19x + 48 = 0$

Square Root Method

This method is generally used when the quadratic is missing the 'bx' term or when the quadratic is in vertex form.

$ax^2 + c = 0$ or $a(x - h)^2 + k = 0$

Example: $2x^2 - 8 = 0$

Example: $3(x - 7)^2 - 21 = 0$

Do on back: $7x^2 - 56 = 0$

Completing the Square Method

This method can only be used when the quadratic is not factorable and also only easy to use when $a \neq 1$ or when 'b' is even. .

Example: $x^2 - 12x + 32 = 0$

Do on back: $x^2 + 10x - 13 = 0$

Quadratic Formula Method

This method is only best used when $ax^2 + bx + c = 0$ is not factorable, $a \neq 1$, or when 'b' is odd (a complicated Quadratic).

Example: $5x^2 - 7x - 10 = 0$

Do on back: $-3x^2 + 7x + 1 = 0$