Solving Quadratic Equations by Taking Square Roots

Name _____

Date _____ Period _____

A quadratic equation is an equation in the form

$$0 = ax^2 + bx + c$$

Quadratic Equations can be solved by...

1. Taking the Square Root of both sides
2. Factoring and use the Zero Product Rule
3. Quadratic Formula
4. Completing the Square

Solve the following equations by taking the square root.

1. Isolate the squared term.
2. Take square root of both sides.

$x^2 = 81$

$y^2 - 16 = 0$

$b^2 - 49 = 0$

Solve the following equations by taking the square root.

1. Isolate the squared term.
2. Take square root of both sides.

$3k^2 - 27 = 0$ $2x^2 + 72 = 0$ $4z^2 - 25 = 0$

Solve the following equations by taking the square root.

1. Isolate the squared term.
2. Take square root of both sides.

$25 - x^2 = 0$ $9a^2 - 1 = 0$ $4b^2 + 16 = 0$