

NAME: _____ Score _____ /10

Please **print** your name

A _____ equation in _____ variables is an equation which may be written in the form

$y = ax^2 + bx + c$ where a , b , and c are real numbers and a is not 0.

The graph of a quadratic equation in two variables is a _____ which opens _____ if $a > 0$

and opens _____ if $a < 0$.

The x-intercepts of the graph of the quadratic equation $y = ax^2 + bx + c$ in two variables are found by solving the equation _____.

The vertex of the graph of a quadratic equation in two variables has first coordinate _____ .

If the discriminant of the equation $y = ax^2 + bx + c$ is positive, the graph has _____ x-intercepts.

If the discriminant of the equation $y = ax^2 + bx + c$ is zero, the graph has _____ x-intercept.

If the discriminant of the equation $y = ax^2 + bx + c$ is negative, the graph has _____ x-intercepts.