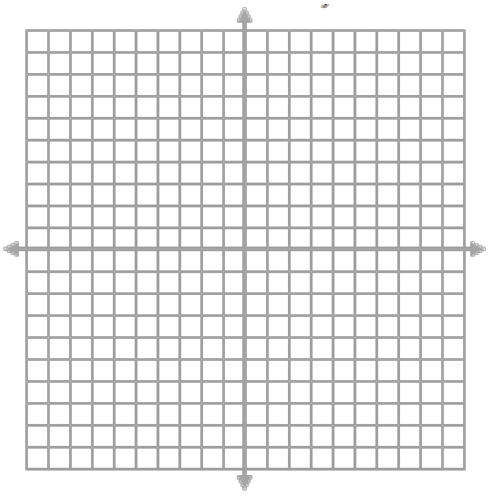
Review: Quadratics

$x^2 + 2x + 1 = 0$

Ways to solve:

- change to vertex form $a(x-h)^2 + k$ where x =
- factor (sum, product)
- discriminate method/quadratic formula



Factoring to Solve

Two numbers where:

sum = b

product = c

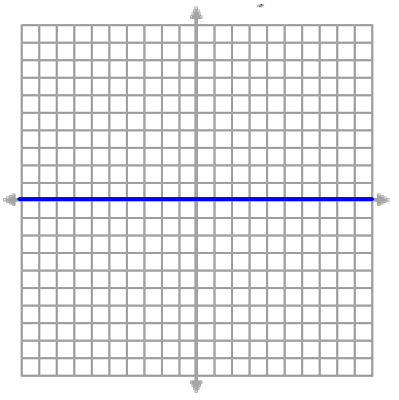
$y = x^2 + 5x + 4$

Quadratic Formula

Systems of Equations and Quadratics

1. $y = x^2$

y	x



2. $y = 0$

How many points of intersection do we have?

Does this change if we change one of the equations?

Discriminant for $ax^2 + bx + c = 0$ is

$b^2 - 4ac$

$x^2 = 0$ same as $x^2 + 0x + 0 = 0$

$x^2 + 1 = 0$

$x^2 - 1 = 0$

Suppose we have $y = x^2$ and $y = x$