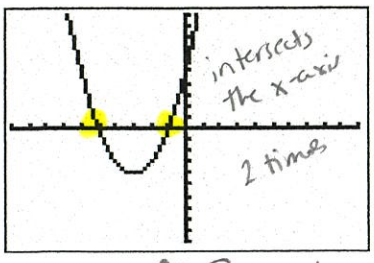
Name Key
Mrs. Roumbos

Date_____
8A Period ____

Do Now

1) When you graph $y = x^2 + 6x + 5$ is produces the following graph:



a: 1
b: 6
c: 5

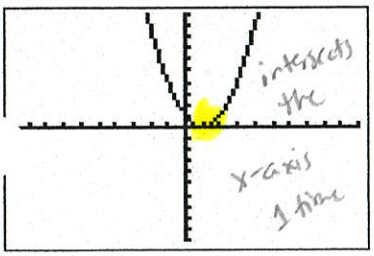
$b^2 - 4ac$
$(6)^2 - 4(1)(5)$
$36 - 4(1)(5)$
$36 - 20$
16

★ 2 real roots ★

What does that mean about the value of the discriminant?

A) It is zero
B) It is positive
C) It is negative

2) When you graph $y = x^2 - 2x + 1$ is produces the following graph:



a: 1
b: -2
c: 1

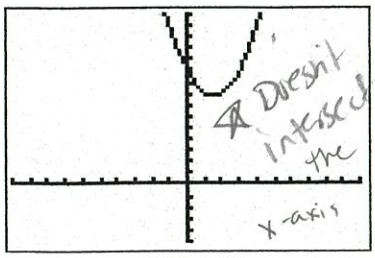
$b^2 - 4ac$
$(-2)^2 - 4(1)(1)$
$4 - 4(1)(1)$
$4 - 4$
0

★ 1 real root ★

What does that mean about the value of the discriminant?

A) It is zero
B) It is positive
C) It is negative

3) When you graph $y = x^2 - 3x + 10$ is produces the following graph:



a: 1
b: -3
c: 10

$b^2 - 4ac$
$(-3)^2 - 4(1)(10)$
$9 - 4(1)(10)$
$9 - 40$
-31

★ 2 complex/imaginary ★ NO real roots

What does that mean about the value of the discriminant?

A) It is zero
) It is positive
C) It is negative