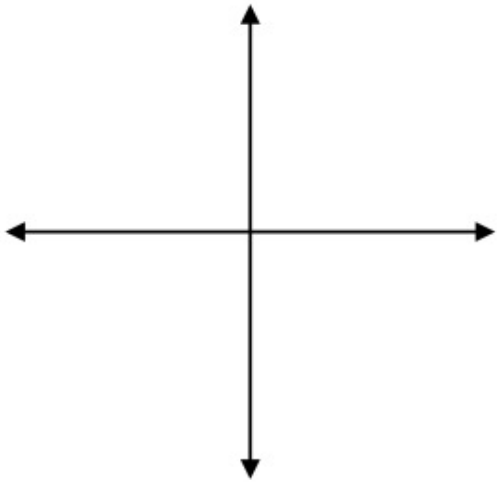
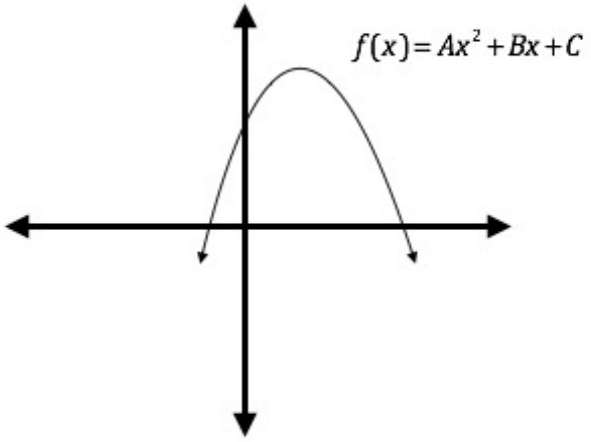
On the graph below, sketch a parabola that will have the follow characteristics:

- The value of the discriminant is zero.
- The value of "A" in $Ax^2+Bx+C=y$ is negative.



3. Given the sketch of a parabola below, what can you conclude about the discriminant, the "A" value and the "C" of it's equation Be specific.



1. The Discriminant must be: Positive/Negative/Zero

because _____

_____

2. The "A" value must be: Positive/Negative/Zero

because_____

_____

3. The "C" value must be: Positive/Negative/Zero

because_____

_____

Create an example of the **Difference of Two Squares.** Then factor it. Then FOIL your factored result to show you get the original example you wrote.

Two students are given the equation $x^2-18x+81$ to factor…

Student A claims $\left(x-9\right)^2$ is the factored version of the equation above.

Student B claims x^2-9^2 is the factored version of the equation above.

Student C claims the given equation is a perfect square trinomial.

Who is correct? Defend your conclusions mathematically.

The quadratic equation $5x^2+17x-12=y$ has two x-intercepts. Using your knowledge of finding x-intercepts using FACTORING and the QUADRATIC FORMULA, reveal the x-intercepts using BOTH methods.

- FACTORING

- QUADRATIC FORMULA