**3 Goals Achieved with Just One Task?!?!**

**\*This will allow you to..**

**- study - create a reference for yourself to use in the future - earn bonus points**

 **Create a GRAPHic organizer..**

for the four forms of quadratic functions using three examples

- vertex form

- intercept form

- standard form (factorable)

- standard form (not factorable)

 **Be sure to discuss the following aspects of each.**

 \*Which feature(s) does each form highlight, and why?

 \*How can you find the vertex, x-intercepts, and y-intercepts in each form?

 \*Describe the process of graphing in each form.

 \*Any other details you find to be important!

**Also answer these general questions:**

1. What will a quadratic function with imaginary solutions look like? How do you know?

2. Describe a case in which the vertex is the same as the x-intercept. Provide an example, and explain everything you know about such a situation.

3. How do you think graphs of quadratic functions may be useful in analyzing real world situations?

Feel free to create and explain an example to support your thoughts! ☺