**Parabola Crafts Set A**

On two different sheets of paper, show all of these items for each of the two quadratics listed.

$$y=3.8x^{2}+6.3x-2.6$$

$$y=-2x^{2}+4x+3$$

a) Calculate the minimum or the maximum.

b) Write the vertex form of the equation.

c) Create a table with at least two values to either side of your vertex. You do not have to see symmetry happening in the table.

d) Using the table of values you created in part c), create and label a graph (on graph paper, eh).

e) Prove that the vertex form of the equation is the same as the starting form of the equation **by** putting your equation in standard form.

**Parabola Crafts Set B**

On two different sheets of paper, show all of these items for each of the two quadratics listed.

$$y=0.8x^{2}+4.3x+1.5$$

$$y=-3x^{2}+6x+1$$

a) Calculate the minimum or the maximum.

b) Write the vertex form of the equation.

c) Create a table with at least two values to either side of your vertex. You do not have to see symmetry happening in the table.

d) Using the table of values you created in part c), create and label a graph (on graph paper, eh).

e) Prove that the vertex form of the equation is the same as the starting form of the equation **by** putting your equation in standard form.