PoW 25: A Visible Graph

1. Graph $y = (x - 100)^2 - 200$ and label its vertex on the axes provided.
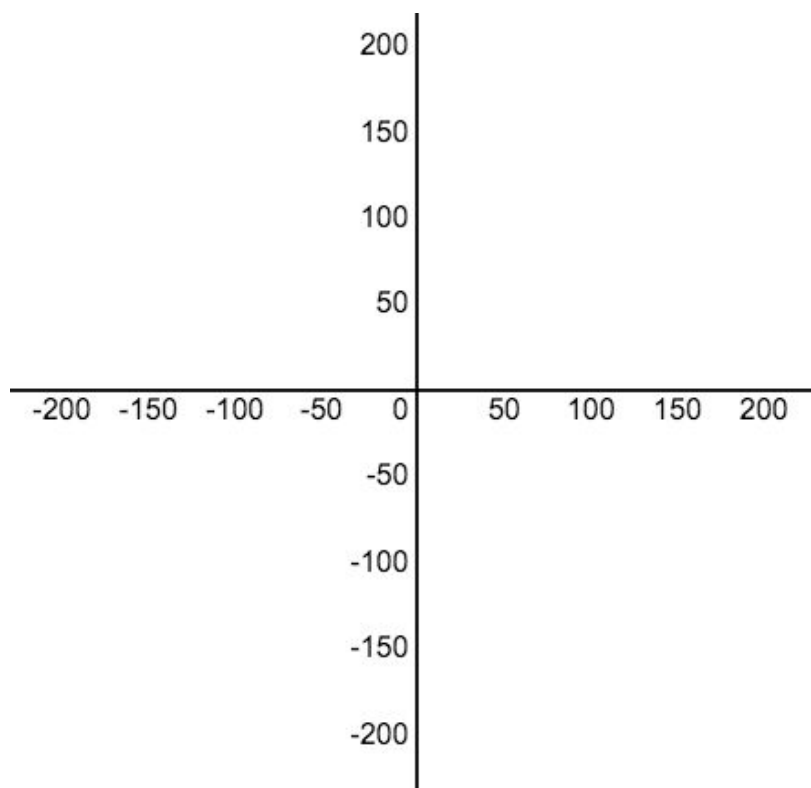
2. Use Desmos to graph $y = a(x - 100)^2 - 200$. On the same graph above, use a dashed line to draw the graph when $a = 0.5$ and $a = 3$. (You may need to zoom out on Desmos).

3. Using the same graph as in part 2, click the home [home] button to return the screen to a smaller window. Find a value for a so that you can see some of the graph on your screen without changing your window from the home window.

Write one or two sentences about how you found a.

This PoW is unusual, because you answer Parts 1 and 2 on this sheet. For Part 3, you may answer it on the back or on a separate sheet.

4 pts.