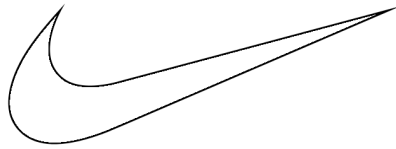
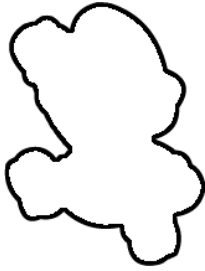


Name: _____

MA 1015: Homework #7

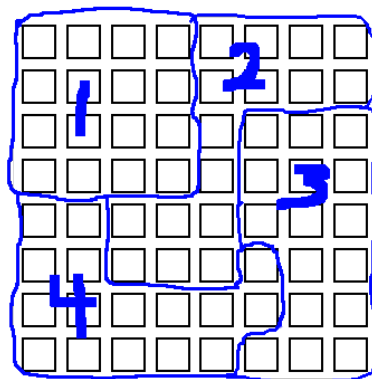
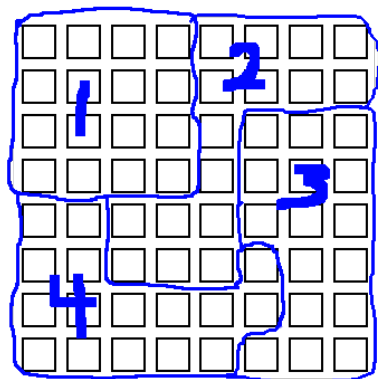
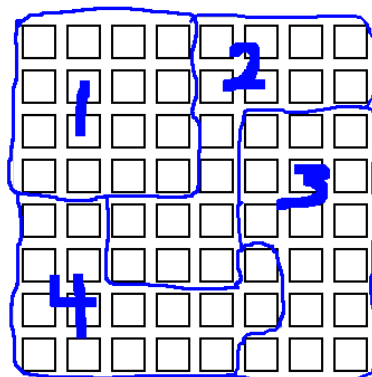
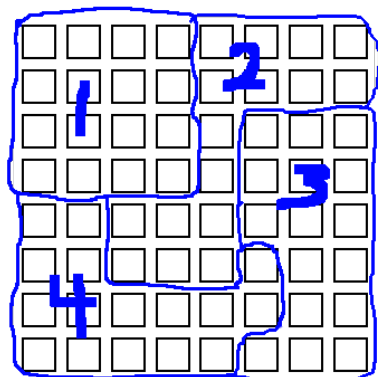
Question 1. For each of these pictures, draw the convex hull. (You can scribble right on top of it.)



Question 2. Think of a nice logo– make sure it's connected (don't use Apple, since it's in 2 pieces) and has no holes (don't use Target, since it's missing space on the inside).

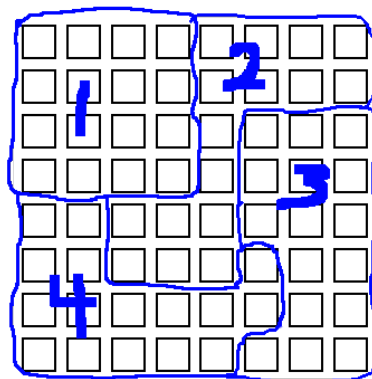
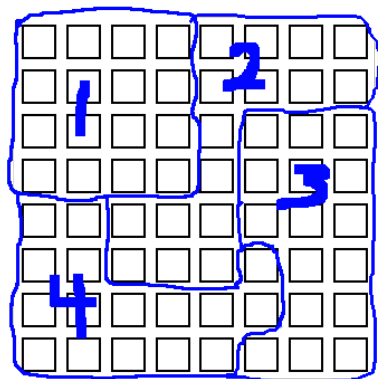
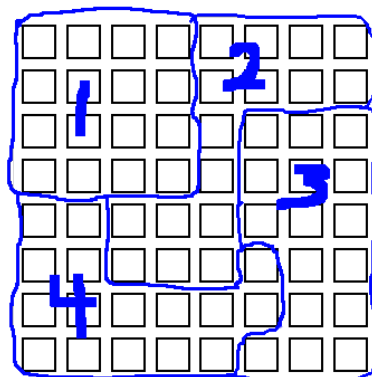
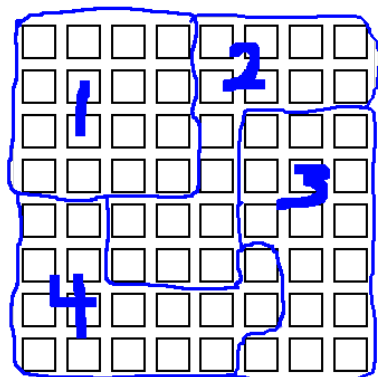
Draw the original logo by itself (you can just draw the outline, like I did above), and then draw it again with the convex hull on top of it.

Question 3. a) Find the Convex Hull ratio of each of these 4 districts. (I gave you the picture 4 times so you can draw on one for each district)



b) According to the Convex Hull ratio, which shape is the weirdest (use a calculator so you can compare the values)? Which is the least weird?

Question 4. a) Find the isoperimetric quotient of each of these 4 districts. (I gave you the picture 4 times so you can draw on one for each district)



b) According to the isoperimetric quotient, which shape is the weirdest (use a calculator so you can compare the values)? Which is the least weird?