Honors HW1 (due 22 January)
Integration can be thought of as the process of computing area by successive approximations. This homework will do it with a "hands"-on project.

1.) Trace and cut out your hand on a blank sheet of paper.

2.) Using a sheet of graph paper (can find on google, can purchase, whatever), trace the hand outline. Be sure to record the width and height of the squares on that sheet. Photocopy the graph paper with your hand trace on it.

3.) One on copy, completely color in any square inside the hand outline. On the other, color in any square inside **OR** partially covered by the outline.

4.) For each coloring, count the total number of shaded squares.

5.) Using this information, estimate the area of your hand. Record this on each sheet. Then find the absolute difference between the areas.

6.) Repeat Steps 2-5 twice, for two **visually different** grid sizes, using the same cutout you made in Step 1.

Question 1: Considering the absolute differences you calculated for each grid size, what can you conclude about the error as the sizes of the squares decreases?
Question 2: Aside from squares, what other grid shape might be more useful for measuring hand size? why?

Submit all materials created for this project and your responses to Question 1 and Question 2.