Today we embark on an ambitious lab assignment due two weeks from today. This lab, in my opinion, marks a turning point in our class. The good news is that you all now possess pretty good map design skills, the bad news is that Carolyn will now turn into grading monster. Things that we let slide in the other assignments will now cost you points. But, as long as you apply the lessons from lecture, and pay attention to detail you’ll be fine. However, if you fail to do these things, and/or try and cut cartographic corners, we will bust you big time… Now for the actual assignment: Make an Isarithmic map of drive times to the Geography building from anywhere within the state of Michigan.

**Part 1: Collect the Data**
This lab is different than the ones prior to Spring Break because you will be collecting some of your own data. This will help you understand one process of data collection for making thematic maps. This skill will help you to prepare for the final project that is fast approaching. Each of you will be required to collect 5 data points to add to the current data set.

2. Go to Google Maps, enter the origin lat and long into the “A” and 42.728573 and -84.47208 in “B”
3. Enter the drivetimes and the distances into the Excel Sheet. The last column in the spreadsheet will calculate the rate by dividing distance by the drivetime.

**Part 2: ArcMap**
4. Add the layers provided for you
5. Plot the data
6. Interpolate to Surface
7. Create Contours
8. Clip the contours to Michigan

**Part 3: Illustrator**
9. Make a beautiful map!

**Grading Criteria (20 points, 2 week lab):**
1. Design for paper (but still up on website as a PDF)
2. Good and accurate labeling
3. Smooth, BUT accurate lines
4. Title is clear centered and the largest type on the map
5. The isolines are the most prominent feature on the map
6. Good use of color, colors are easy on the eyes and well chosen
7. Source information, Google and MI CGI
8. Well designed and easily understood legend
9. Neatline and margins are at least ½ inch
10. Well designed layout
11. Overall good use of skills you have learned from the course thus far
12. On a separate sheet of paper, answer the following: (in the English I should be able to expect from a student in a 400 level course and please retype the questions before each answer)
   - What attribute did you map?
   - Why is this appropriate data for an Isarithmic map?
   - How did you interval your data?
   - Why did you choose this classification?
   - What is the general spatial trend of this attribute in Michigan?
   - What are the sources of error in this map? From your own driving experiences how would you rate the accuracy of your map?