Statistical Manipulation

We will be using crime statistics information from the FBI database and from Statistics Canada to make some graphs using an online graph generator.

You will create two graphs, one objective, one manipulative for two different data sets. This will be a total of 4 graphs.

Graphs can be any kind of your choice, line graph, bar graph, pie chart, 2d, 3d, whatever. They can be hand drawn if you want, but computer generated is strongly recommended.

Your method:

1. Look at some data sets to figure out what they are about
2. Write down what you think this data is actually tell you
3. Get Mr. Conne to check and that you have the right idea
4. Make a graph in a way that makes the information in (2) very obvious to someone looking at the graph
5. Graph a graph in a way that makes the information in (2) unclear or contradictory to someone would think from looking at the graph
6. Repeat for a second data set

You will get an A if: Your graphs use a minimum of 5 different data points each. Your "objective" representations are reasonable and unambiguous in what they are trying to represent. Your "manipulative" representations show ideas that are could be disproven by looking at the data in some other way.

You will get a B if: Your graphs use 3 or 4 data points each. Your "objective" representations are reasonable but perhaps ambiguous in what they are trying to represent. Your "manipulative" representations show ideas that are reasonably supported by other ways of looking at the data.

You will get a C if: Your graphs have only 2 data points each. Your “objective” representations are ambiguous in what they are trying to represent. Your “manipulative” representations are more confusing than manipulative or demonstrate the same thing as your “objective” representations.