Math 1600, Section 11, Fall 2016 – Statistics
Quiz 1 Review Sheet (Chapters 1 and 2)

Quiz 1 will be held in S 104 starting at 10:50 am on Thursday, September 24th

Bring to Quiz

- Calculator (you may not use an electronic device connected to the outside world, e.g. no cell phones)
- Pencils and Eraser (extras are good, pens are discouraged)
- Small Ruler (optional)
- One 3 inch by 5 inch card, with writing on one side in your handwriting (optional)

Provided at the Quiz

- Quiz
- Scratch paper

How to Study

- Work Problems (using your 3x5 card)
    - Homework
    - WileyPlus
    - Similar problems in the book that were not assigned but have answers in the back
    - Examples in the book (cover up every thing by the prompt and work it, then check)
    - Labs (especially for more Chapter 1 problems)
- Review Lecture Notes
- Review Book
    - Look at Chapter Summaries
    - Drill down on concepts you didn't understand the first time
- Come to office hours / tutoring center / your group with questions

Material to Review

Chapter 1

- Definitions:
    - Variable or Characteristic of Interest
    - Unit
    - Population of Units
    - Statistical Population
    - Sample
- Be able to discuss
    - whether a given sample is representative
    - how to get a representative sample

Expect a problem with a data collection scenario, where you will be asked to identify some, or all, of the items listed in "Definitions" above and comment on the representativeness of the sample.

Chapter 2

- Define and Give Examples
  - Categorical Data
  - Discrete Numeric Data
  - Continuous Numeric Data
- Be able to read and construct (with appropriate labels and titles)
  - Pareto Diagrams
  - Histograms
  - Dot Diagrams
  - Stem-Leaf Displays
  - Box Plots
- Be able to compute and interpret
  - Mean
  - Median
  - Standard Deviation
  - Variance
  - Percentiles
- Understand how outliers affect the mean and median
- Be able to discuss the relative advantages of the mean and median

Expect a problem that requires you to compute the standard deviation for a sample of size 5, 6 or 7.

Expect that some of the problems will require you to think beyond picking a formula or remembering how to draw a diagram.