Chapter 1 Study Guide

You are expected to thoroughly understand all concepts from textbook, notes and homework. Specifically, you should know how to do the following:

1. Draw Stem-and-Leaf plots given data (including notes for stem and leaf digits)

   Example 1.7

2. Given data, find frequency and relative frequency; Draw histograms for both discrete and continuous data; Find density for continuous data, draw density histogram and find relative frequency based on density; Describe shapes of histogram by symmetric, left- or right- skewed.

   Examples 1.9, 1.10, 1.11

3. Find mean and median for any data set; Describe relationship between mean and median based on skewness; Describe skewness of data given mean and median.

   Examples 1.14, 1.15

4. Find trimmed mean and trimming percentage given how many numbers to be trimmed from each end of ordered data.

   Example 1.16

5. Find standard deviation and variance for samples and population data

   Example 1.18

6. Find fourths, fourth spread, five-number summary and draw boxplots; Interpret distribution properties indicated by any boxplot and describe skewness to both the middle 50% of data and all data; Find outliers and show them on boxplots

   Examples 1.19, 1.20, 1.21