Chapter 4 Study Guide

* Know which numerical summaries are appropriate for numerical data and which are appropriate for categorical data
* Know what quantities make up the 5-number summary, know how to determine outliers using the IQR formula
* Know how to construct a skeletal boxplot and a modified boxplot, be able to describe a distribution from a boxplot
* Know how to calculate and interpret a z-score
* Know how to calculate a trimmed mean using a trimming percentage
* Understand which numerical summaries are affected by outliers
* Know the relationship between the mean and median with regards to different shaped distributions
* Understand how a boxplot separates the data
* Know the Empirical Rule percentages and when to use it
* Know when it is appropriate to use the mean and standard deviation and when you should choose to use the median and the IQR
* Know the relationship between standard deviation and variance. Why would you choose one over the other?
* Know how to interpret percentile
* How does adding the same constant to every number in a set of data change the mean and the standard deviation?