

## **Chapter 11: Inferential Statistics (11.1-11.3; 11.7)**

Topics: Organize data using the graphing calculator.

- Entering 1 variable statistics and finding the measures of central tendency and 5 number summary.
- Be able to describe the shape of a histogram and determine which data to use to describe it.
- Classify variables as discrete or continuous.
- Construct a probability distribution and find the probability mean of a data set.
- Find the variance and standard deviation of a probability distribution.
- Find the expected value of a probability distribution
- Find the area under a normal distribution curve.
- Know the Empirical rule and how to use it.
- Find the  $z$ -values for a specific data set and the area under a curve.
- Find the probability for a specific range of values.
- Use probabilities to find data points (inverse norm)
- Enter bivariate data into your calculator and measure the linear correlation using the correlation coefficient.
- Run linear regression and find the residual plot.
- Calculate the residual for a specific data point.