**Chapter 2.2 – Assessing Normality**

*Quick Summary*

* + To determine if a distribution is approximately Normal, follow these steps:
    - Graph the data (stemplot, dotplot, histogram)
    - Determine the shape of the distribution (skewed? roughly symmetric?)
    - If roughly symmetric, check to see how well the data fits the 68-95-99.7 rule
      * If the percentages of actual data that fall within 1, 2 and 3 standard deviations of the mean are close to 68%, 95% and 99.7% then the distribution is approximately Normal
    - Construct a Normal probability plot *(not required for the AP exam, but a useful extra tool that you can use to strengthen your arugment!)*
      * If the plot is approximately linear, the plot indicates the data are Normal
      * Systematic deviations from a straight line indicate a non-Normal distribution