Chapter 5 Study Guide

* Know the properties of the correlation coefficient, r.
* Know all of the interpretations: r, r2, b, a, se
* Know that scatterplots and regression analysis are for bivariate numerical data.
* Be able to make predictions from a regression equation.
* Know what a residual is and how to find one.
* Know the definition of an outlier and an influential point.
* Know how slope and correlation coefficient are related.
* Know how the values r, r2, and se help to determine if a regression model is a good fit for the data.
* Be able to do all calculations: finding r, r2, se, and the regression equation

making predictions from the equation

calculating residuals

* Know the danger of extrapolation.
* Know how to create a scatterplot and a residual plot. Be able to discuss the features of each type of plot.
* Understand the difference between association and causation.
* Be able to determine which variable is the explanatory and which is the response.