

Task #1: goto <http://istics.net/stat/Correlations>

Instructions: Match the values of the correlation coefficient with the corresponding scatterplot using what you know about strength and direction of linear relationships. Notice also that just below the plots, the applet keeps a running count of how many correct matches you have made. Continue matching scatterplot and correlation coefficients until you have accumulated at least 20 correct matches.

Task #2: goto

<http://www.rossmanchance.com/applets/guesscorrelation/GuessCorrelation.html>

Instructions:

1. Click on the “New Sample” button, which will generate a scatterplot. Enter your guess for the correlation in the box called Correlation Guess and hit “Enter”. The applet will then reveal the actual value of the correlation coefficient.
2. It isn’t easy to guess the value of the correlation coefficient exactly, so if a guess is within 0.1 of the actual value, it is a pretty good guess. (Example: if you guess 0.7 and the actual value is anything between 0.6 and 0.8, you have a pretty good guess.)
3. Click New Sample and estimate the correlation as many times as it takes for you to be comfortable with your ability to estimate the value of the correlation coefficient within 0.1.

Task #3: goto

<http://www.stattucino.com/berrie/dsl/regression/regression.html>

Instructions: In this applet, you use the mouse to add points to a scatterplot by clicking on the scatterplot wherever you want to add a point. Try to create scatterplots that have a correlation coefficient that is close (within 0.1) to each of the following r-values:

$$r = +0.8, \quad r = -0.9, \quad r = 0.4, \quad r = 0.7, \quad r = -0.2$$