## **Psychology 513 - Quantitative Models**

Bob McFatter *Homework No. 8* 

1. The JMP data set called *gonogo.jmp* (available on my web page) contains data from a Go/No Go trial-and-error learning experiment in which Ss were to learn which numbers of a stimulus set were 'Go' (respond for a monetary reward) numbers, and which were 'No Go' (inhibit responding so as to avoid a monetary loss) numbers. The number of passive avoidance errors (PAE) made in the task is the variable we are interested in predicting as a function of extraversion (E), neuroticism (N) and sex (coded 1=male, 0=female in the data set). Please use regression analysis to predict PAE from these variables and their interactions and interpret the results. Feel free to standardize or recode the variables in new columns as you see fit to make interpretation easier. Use 3 different codings for sex (1=male, 0=female; 0 =male, 1 = female; and 1 = male, -1 = female), present the regression results for each, and explain how the interpretations of the coefficients in the equations change as a function of coding. Also, explain which coefficient(s) would change if the coding were 2 = male, 1 = female.