1. Use the data set DartPoints to perform a logistic regression predicting Name from Length, Width, and Thick. Use Rcmdr to specify the model on the Statistics/Fit Models/Generalized Linear Model menu tab. Discuss the results. In particular, are all three variables necessary? If not compute another model leaving out one of the variables. Use an anova test to compare the two models. Is the simpler model significantly different? If it is not, use the reduced model. If it is significantly different, use the model with all three variables for the next question. What is the accuracy of the final model?

2. Using the Howells3Pops data set, create a subset by extracting the data for a single population (you can pick whichever one you want). Use logistic regression to predict sex in that population. Start by choosing six different measures that are not overly correlated with one another. Construct a logistic regression model and examine the significance of the slope values. Remove one insignificant variable at a time until you have a model with only significant values. Compare the model previous one with ANOVA. If it is not significantly different from the model with more variables, stop. What is the accuracy of your prediction of sex using the model?

3. Using the Howells3Pops data set create a linear discriminant analysis model to predict population using all sixteen metric variables. What is the accuracy of the predictions using the model?