

MATH 664 HW  
Due February 13, 2009

1. **Project** : Use `car_test_frame.txt` for which a regression tree would summarize the data. Use Reliability as the dependent variable and Country and Mileage as the independent variables. Make sure you delete all records corresponding to “NA” in the variable Reliability. Plot the graph of deviance as a decreasing function of the number of nodes and the cost-complexity parameter  $k$ . Use this graph to determine the optimal number of terminal nodes. List the predicted values and give the summary of the findings in form of a report to the client.
2. SAS graphics homework #2.8, page 66, textbook (fifth edition).