**Suaray Due 12.01.15**

**STAT 410/510: REGRESSION ANALYSIS- QUIZ 3**

This quiz is open book, open notes, open Beachboard. There are a total of 50 possible points. You must show all work to get credit. Please do not hesitate to email me if you have questions.

**1. (35 POINTS)** For the **hald** data set, use the model selection criteria discussed in class (*R2, R2adj, AIC, Cp*, forward, backward, and stepwise selection (set all alpha levels to 0.1)) to determine which model is best. Explain why you made this choice (in other words, list the value of each and state why all things considered, your model is optimal).

**2. (15 POINTS)** The DFFITS statistic is proportional to . Describe why it is effective in identifying outlying observations in both the *X* and *y* directions.