

**Assignment #8, Stat 5511, Spring, 2008**  
**Due Wednesday, May 7**

- (1) Do problem 6.5 on p.199.
- (2) Do problem 6.12 on p.200.
- (3) Do problem 9.1 on p.300.
- (4) Do problem 9.2 on p.300
- (5). Do problem 9.5 on p. 300.  
( In part (a), Evaluate  $R_{adj}^2$ ,  $C_p$ , and  $MS_{Res}$  for each model. What submodel do you recommend?)
- (6) Optional. Prove that the trace of  $H = X(X'X)^{-1}X'$  is  $p$  where  $p=k+1$  ( $k$  is the number of regressors)