

ASSIGNMENT #5, STAT 5511, Spring, 2008
Due Wednesday, March 26

- (1) Do Problem 3.1 on p.114
- (2) Do Problem 3.5 (d, e, f, g) on p.115.
- (3) Do problem 3.10 on p.119.
- (4) A multiple regression equation was fit with $n=15$ observations and 5 predictors X_1, X_2, X_3, X_4 and X_5 . We obtained $SS_T = 1477.83$ and $SS_{Res} = 354.68$.
 - (a) Calculate R^2 and R^2_{Adj} (the adjusted R^2)
 - (b) Test the hypothesis $H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = 0$
vs H_1 : At least one of the $\beta_i \neq 0$ at the level $\alpha=10\%$.
- (5) Do problem 3.18 on p.119.
- (6) Do problem 3.20 on p.119.
- (7) Optional . Do problem 3.27 on p.120.
- (8) Optional . Do problem 3.32 on p.120.