

Homework 8, Due Wednesday, April 7

1. Question 4.12.3 of the text (the bulk of the question appears on page 342). (Grading: 1 point for each of arts a through 3, 2 points for f and g. Your answer to part d does not need to be detailed.)
2. Question 4.12.4, the following portions:
 - (a) Part b, subparts i, ii, iii, iv (these are closely interrelated so treat them all as one question) (3 points)
 - (b) Part b, subparts vii, viii, ix, x, xi (these are closely interrelated so treat them all as one question) (4 points)
 - (c) Part c but only in the following form. The question defines two models, called model C and model D, which are alternatives to the full model (call it F) that contains all seven covariates. Perform a hypothesis test in which (i) model C is the null hypothesis and model D is the alternative, (ii) model D is the null hypothesis and model F is the alternative. Then, (iii), state which you consider the best among models C, D and F, with a summary of your reasons. (4 points)