5.1 KNNL Problem 7.31.

5.2 Derive equation 7.56 (HINT: Recall that $b_1$ can be obtained by regressing the residuals of $Y|X_2$ vs $X_1|X_2$)

5.3 KNNL Problem 8.6

5.4 Recall the SENIC data set used in Exercises 3.2 and 3.8. For this exercise, determine the “best” model considering all possible explanatory variables. Write a short paragraph explaining your decision process. Remember to check your assumptions and consider any outliers. Also, remember that for region, you’ll need to consider the creation of some dummy variables if you want to consider this explanatory variable. Your summary and support material can be no more than 5 pages.