STAT 415/615 HOMEWORK 2

#1 Page 150 problem 3.15 (a, b) Found in the online text book.

The full data set is provided below.

Y X

0.07 9.0

0.09 9.0

0.08 9.0

0.16 7.0

0.17 7.0

0.21 7.0

0.49 5.0

0.58 5.0

0.53 5.0

1.22 3.0

1.15 3.0

1.07 3.0

2.84 1.0

2.57 1.0

3.10 1.0

#2 Page 151 problem 3.17 ( a – e); Found in the online text book.

#3 Page 201 problem 5.1; Found in the online text book.

#4 Call the mtcars data set and produce a linear model that uses hp (horse power) to predict mpg (miles per gallon). Using techniques and R code demonstrated in class, produce a prediction interval, and a confidence interval for the response variable mpg at a fixed mpg value of .21. (follow the coding sequence closely of the examples shown in class.)