

Homework 8 (Due on April 10)

April 3, 2014

STA 5172

Logistic Regression

Download the data set called “menarche” (Milicer, H. and Szczotka, F., 1966, Age at Menarche in Warsaw girls in 1965, Human Biology, 38, 199-203) from <http://www.stat.fsu.edu/~debdeep/menarche.txt>, in which there are three variables: “Age” (average age of homogeneous groups of girls), “Total” (number of girls in each group), and “Menarche” (number of girls in the group who have reached menarche). Fit a logistic regression and plot the estimated probability for menarche vs. the age of women. Interpret the coefficient of “Age” and find the odds ratio of menarche for age 9 and 15.