

Stats Homework 6

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There are other built in data set in **R** outside of the Lock5Data set, One of these gives the average weight of women at a given height. This dataset can be loaded by typing "data(women)" and then you can work with it just as you would if it was from the Lock5Data set. Your job is to fit a model which predicts weight as a polynomial function of height. Your job is to pick which type of model to use based on the residual plot (how to d this was explained in class and in the notes).

You should turn in one document. It should summarize how you picked which degree polynomial to use and include residual plots for the lower degree polynomials to justify your decision. The paper should also include the equation of the regression line you choose and an interpretation of both the R^2 and adjusted R^2 values. The interpretation of the adjusted R^2 value should only mention why the adjusted R^2 value may be more useful in general. It should also include a separate section (or an appendix) which contains the code copy-pasted into the document. If the code does not copy-paste well, you can include the code as a picture in the appendix.