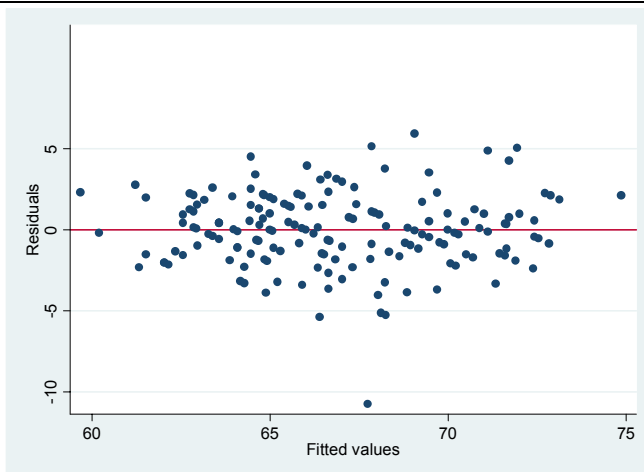
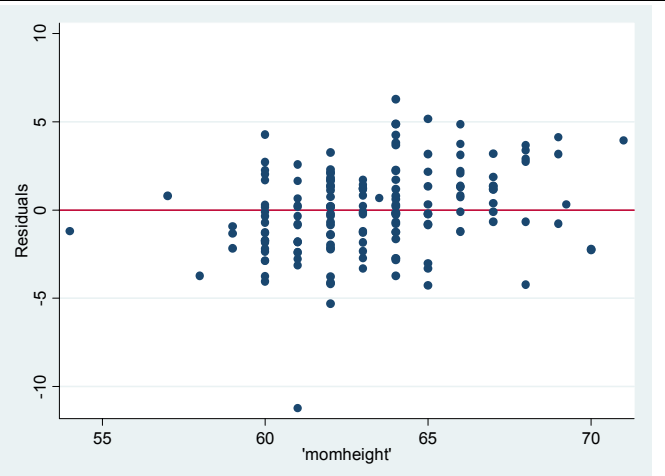
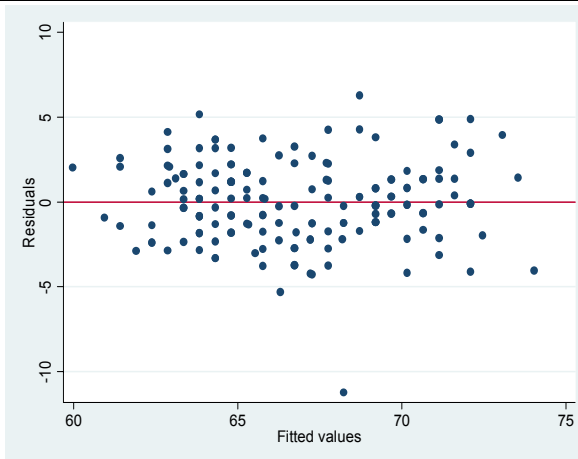
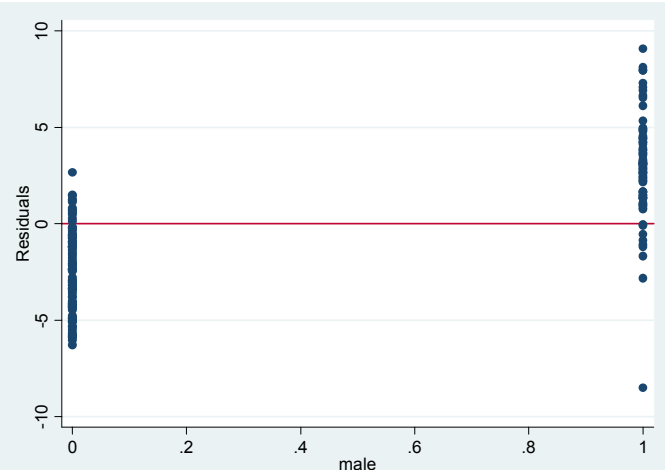
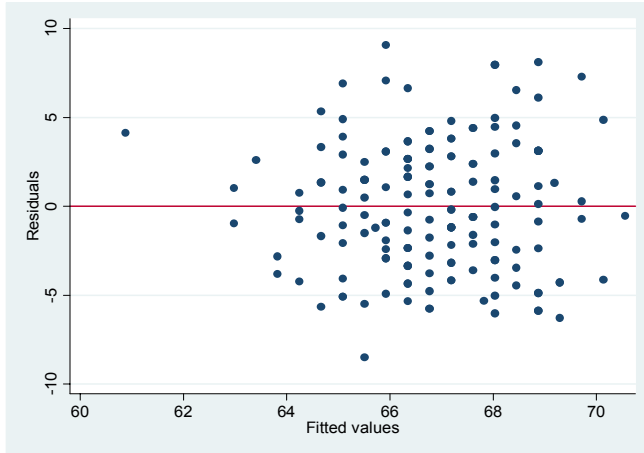


Statistics 110-201

Example to illustrate the extra sum of squares idea.

Notice how residuals decrease as more variables are added. (See explanation in lower right box.)



Explanation of graphs:

On the left are the residuals vs fitted values for:

- 1) Dadheight only
- 2) Dadheight and M/F
- 3) Dadheight, momheight and M/F

Notice how the residuals get smaller as more variables are added, especially when M/F is added.

On the right are the residuals versus:

- 1) M/F when dadheight only was used to predict
- 2) Momheight when dadheight and M/F were used.

Notice the linear pattern in each of these two plots, indicating that the variable on the X-axis could be added to the model as a linear term.