(A Somewhat Shorter) Long Problem Set 5

The file "Anscombe.RData" contains three sets of x–y data; the objects for each set are identified as

> set 1: x1 and y1
>
> set 2: x2 and y2
>
> set 3: x3 and y3

First, complete a linear regression analysis for each set of data using the linear model $y = \beta_0 + \beta_1 x$. Examine the summary data for each regression analysis and discuss the similarities and differences between the results. **Do not plot the data before completing this part of your work!**

Next, for each data set, prepare a plot of the data and overlay your regression model and comment on your results.

Finally, for any data set where the regression model is inappropriate, propose a better linear model; you may wish to consider how you might modify the data sets. When you are finished, you should have a suitable model for each data set.

Your answers are due in class on Monday, October 10th.