

Homework 3, Due F 02/02

Read Chapter 4 (Moore).

Problems

1. Download the attached plot and data set.
 - a) What does the plot show? What is the explanatory variable, x and the response variable, y ?
 - b) For each point, . on the plot, mark the corresponding SNO from the data set. Are there any outliers? What is the point *?
 - c) Compute the correlation between **Age in years** and **Year of birth** from the data set. What does it tell you?
 - d) Remove the outliers and recompute the correlation. What do you see? Why?
 - e) Using 0 for **F** and 1 for **M**, compute the correlation between **Age** and **Sex**. What does it show?
 - f) What do you think the correlation will be, if you use 1 for **F** and 0 for **M**? What if 1 for **F** and 2 for **M**? You need not recompute the correlations but give reasons for your answers.
2. Ex. 4.1, Page 92.
3. Ex. 4.4, Page 93.
4. Ex. 4.5, Page 96.
5. Ex. 4.10, Page 104.
6. Ex. 4.35, Page 112.