Economics 310 – Fall 2004
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Problem Set #1

This problem set is due in lecture on September 27th. We do not accept late problem sets. **Be sure to show your work** (that is, do not use a spreadsheet or statistical program to generate your answers). Write your name and the name of your Teaching Assistant on your problem set.

Answer all the problems below. Unless indicated by an "X" prefix, the numbering indicates the corresponding problem from the textbook.

- 2.54
- 2.62
- 2.76
- 2.78
- 2.96
- 2.97 - (a) & (b) only
- 2.134 (a)-(c), also...
  - d) Construct a histogram of these data, selecting an appropriate class length.
  - e) Construct a dotplot of these data.
  - f) Which of the above graphical displays is most useful in describing the data set?
- 2.146
- 3.4 – Compute these without the use of a calculator.
- 3.16
- 3.20
- 3.26
- 3.38
- 3.42
- 3.54
- 3.56
- 3.64
- 3.110
- Problem X1:

  Let: $x_1 = 16, x_2 = 4, x_3 = 1, x_4 = 25, x_5 = 4$

  $y_1 = 9, y_2 = 0, y_3 = 4, y_4 = -1$

  Evaluate:

  a. $\dfrac{\sum_{i=1}^{4}\left(\sqrt{x_i}+3\right)}{\sum_{i=1}^{4} 2\sqrt{(y_i)^2}}$ b. $\dfrac{\sum_{i=2}^{5}\left(\sqrt{x_i}\right)+3}{2\sqrt{\left(\sum_{i=1}^{4} y_i\right)^2}}$ c. $\sum_{i=1}^{4}\dfrac{\left(\sqrt{x_i}+3\right)}{2\sqrt{(y_i)^2}}$