

Unit 2 – Data Visualization Homework

Due Date: Monday September 25, 2017
Last submission date for credit: Monday October 2, 2017

#1. This exercise gives you practice with the ideas of Unit 2, Section 5 (“Graphical Summaries for Quantitative Data”)

Using the data below (source: *Daniel*, 6th edition page 30, problem 2.3.5 *note: You do NOT need to buy this book.*),

7	10	12	4	8	7	3	8	5
12	11	3	8	1	1	13	10	4
4	5	5	8	7	7	3	2	3
8	13	1	7	17	3	4	5	5
3	1	17	10	4	7	7	11	8

1a. By any means you like (by hand, StatKey, Stata, R), construct a stem and leaf display.

TIP – There is no single correct answer here. Play with it! cb.

1b. By any means you like (by hand, StatKey, Stata, R), construct a histogram

TIP – Again, there is no single correct answer here. Play with it! cb.

#2. This exercise gives you practice with the ideas of Unit 2, Section 5 (“Graphical Summaries for Quantitative Data”)

The following are two sets of behavioral ratings as measured by the Zang Anxiety Scale (ZAS)

SET 1 - 26 persons with a diagnosis of panic disorder:

53	51	46	45	40	35
59	51	45	60	35	
45	38	53	43	31	
36	40	41	41	38	
69	41	46	38	36	

SET 2 - 21 healthy controls:

26	26	25	25	25
28	26	26	25	
34	30	31	28	
26	34	25	25	
25	28	25	25	

- 2a.** Construct Box and Whisker plots using the data from sets #1 and #2. **Feeling brave?** Produce a side-by-side box plot that permits direct comparison of the two groups!
- 2b.** In one or two sentences, compare the two groups. As we discussed, a good strategy is to first state the facts shown in the graph and then state your conclusions.