

Math 170S
Homework for Section 6.2 *†
Instructor: Swee Hong Chan

Note: Homework will not be collected, but the question for Quiz 2 might be picked from the homework questions.

1. Consider the data presented in Problem 6.2-8 of the textbook.
 - (a) Construct an ordered stem-and-leaf display of this data.
 - (b) Find sample mean and sample standard deviation of the data.
 - (c) Find the five-number summary of the data and draw a box plot
 - (d) Find the 90th percentile of the data.
2. Suppose that we have the following sample of Google's stock price for the past 50 weeks (unit in \$ per stock)

320	326	325	318	322	320	329	317	316	331
320	320	317	329	316	308	321	319	322	335
318	313	327	314	329	323	327	323	324	314
308	305	328	330	322	310	324	314	312	318
313	320	324	311	317	325	328	319	310	324

- (a) Compute the sample mean \bar{x} and the sample standard deviation s .
- (b) Draw the ordered stem-and-leaf display. How many sample values are between $\bar{x} \pm s$, and $\bar{x} \pm 2s$?
- (c) Give the five-number summary of the sample. Draw the corresponding box plot.

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†This homework is based on Hanbaek Lyu's and Liza Rebrova's homeworks from the previous quarter, and I would like to thank her for her generosity here. "*Nanos gigantum humeris insidentes* (I am but a dwarf standing on the shoulders of giants)".