

Stat 171 - Worksheet for Section 2.2

Name: _____

1. Use a stem and leaf plot to organize the ages of the 50 most powerful women listed below. Describe any pattern.

26, 31, 35, 37, 43, 43, 43, 44, 45, 47, 48, 48, 49, 50, 51, 51, 51, 51, 52, 54, 54, 54, 55, 55,
55, 56, 57, 57, 57, 58, 58, 58, 59, 59, 59, 62, 62, 63, 64, 65, 65, 65, 66, 66, 67, 67, 72, 86

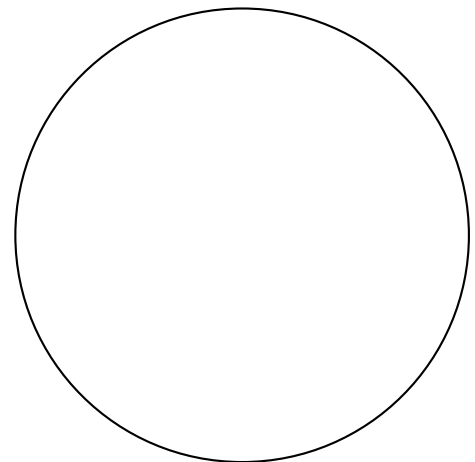
- (a) List all possible stems.
- (b) List the leaf of each data entry to the right of its stem and include a key. Make sure the leaves are in increasing order from left to right.
- (c) Describe any patterns in data.

2. Use a dot plot to organize the ages of the 50 most powerful women.

- (a) Choose an appropriate scale for the horizontal axis.
- (b) Represent each data entry by plotting a point.
- (c) Describe any patterns.

3. The number of earned degrees conferred (in thousands) in 1900 are shown in the table. Use a pie chart to organize the data.

Type of degree	Number (in thousands)	Relative f	Angles
Associate's	455		
Bachelor's	1051		
Master's	330		
Doctoral	104		
Sum			



4. Every year, the Better Business Bureau (BBB) receives complaints from customers. Here are some complaints the BBB received in a recent year.

14,156 complaints about auto repair and services.

8568 complaints about insurance companies.

6712 complaints about mortgage brokers.

15394 complaints about telephone companies.

5841 complaints about travel agencies.

Use a Pareto chart to organize the data. What source is the greatest cause of complaints?

5. The lengths of employment and the salaries of 10 employees are listed in the table at the left. Graph the data using a scatter plot. Describe any trends.

length of employment (in years)	Salary (in dollars)
5	32,000
4	32,500
8	40,000
4	27,350
2	25,000
10	43,000
7	41,650
6	39,225
9	45,100
3	28,000

6. Use the data in <https://www.dropbox.com/s/inxu12cphi6i78y/2-2-1.csv>, and draw a proper graph to represent the data, using a computer plotting software.¹
7. Use the data in <https://www.dropbox.com/s/rd78jgxy8q198xe/2-2-2.csv>, and draw a proper graph to represent the data, using a computer plotting software.²

¹You can try <http://plot.ly>

²All the links in the course website are clickable: <http://wiu.edu/users/khm102/courses/Stat171Sp15/WS2-2.pdf>