Math 123
Fall 2017
Dr. Lily Yen

Assignment 3

Show all your work

Name: _____
Number: _____
Signature: _____
Score: ___/20

Problem 1: Below is a list of ages of 30 people in Kamloops who volunteered to help victims of wild fire in BC this summer.

60, 69, 72, 62, 57, 66, 55, 69, 66, 72, 51,
74, 70, 58, 58, 53, 68, 53, 55, 53, 53, 59,
57, 51, 72, 65, 51, 60, 70 and 64.

a. Make a stem-and-leaf plot of the data.

b. Construct a relative frequency table using five classes.

c. Draw a histogram from your relative frequency table. Clearly label the axes.

Score: /6

Problem 2: In our class of 21, suppose 10 drive to Cap, 8 take public transit, and 3 walk. Draw a pie chart for the above data. Include your steps for the calculation of each sector angle in the pie.

Score: /3

Problem 3: Below is a list of 21 ages of the students from one of Lily's classes.

20, 19, 22, 22, 27, 26, 25, 19, 26, 22, 21,
24, 20, 18, 18, 23, 18, 23, 45, 33 and 43.

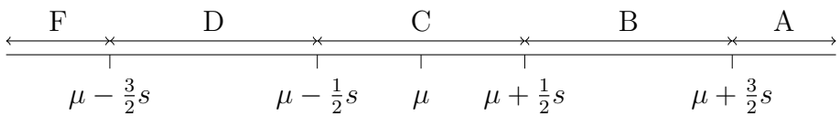
Construct a box-and-whisker plot by computing the median, first and third quartiles complete with the minimum and the maximum.

Score: /5

Problem 4: Using the same age data from the previous problem, compare its mode, mean, and median.

Score: /2

Problem 5: The grade assignment on the curve is shown below where μ is the mean and s is the sample standard deviation.



Suppose the final marks in a class of ten students are 80, 76, 81, 94, 79, 60, 85, 100, 75 and 92. What grade does the person earning 79 get?

Score: /4