

Math 123
Fall 2022
Dr. Lily Yen

Assignment 3

Show all your work

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

Problem 1: Below is a list of ages of 17 people in Lily's church choir this year.

65, 74, 77, 56, 95, 63, 58, 86, 70, 30, 24,
48, 75, 69, 55, 76 and 60.

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

b. Construct a relative frequency table using five classes.

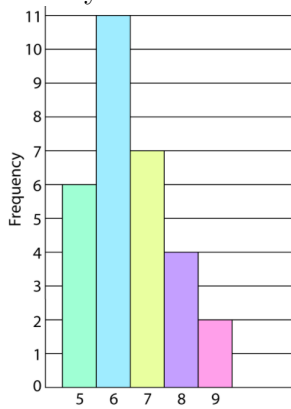
c. Draw a histogram from your relative frequency table. Clearly label the axes.

Score: /6

Problem 2: In a class of 31 students, suppose 10 live on campus, 16 rent off campus, and 5 live at home. 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: The histogram shown is a summary of a survey of the number of bicycles (on the horizontal axis) ever owned by a sample of students in the budget travel club at Capilano University. Answer the following questions.



- Find the number (n) of students surveyed.
- Find the average number of bicycles ever owned in the sample.
- Find the mode for the number of bicycles ever owned in the sample.
- Find the median for the number of bicycles ever owned in the sample.
- Compute the first quartile and the third quartile from the sample data.
- Draw a boxplot for the data set.
- Find the standard deviation of the data.

Score: /11