

Assignment 6

Show all your work

Name: \_\_\_\_\_

Number: \_\_\_\_\_

Signature: \_\_\_\_\_

Score: \_\_\_\_/16

**Problem 1:** Below is a stem-and-leaf plot of a sample data set of ages of volunteers in a food bank. Answer the following questions. Remember to include units when applicable.

1	5	7	7	9
2	0	4	8	
3	0	2	2	5
4	3	6	8	
5	2	5	5	5
6	0	5	9	
7	0	4	6	
8	2			

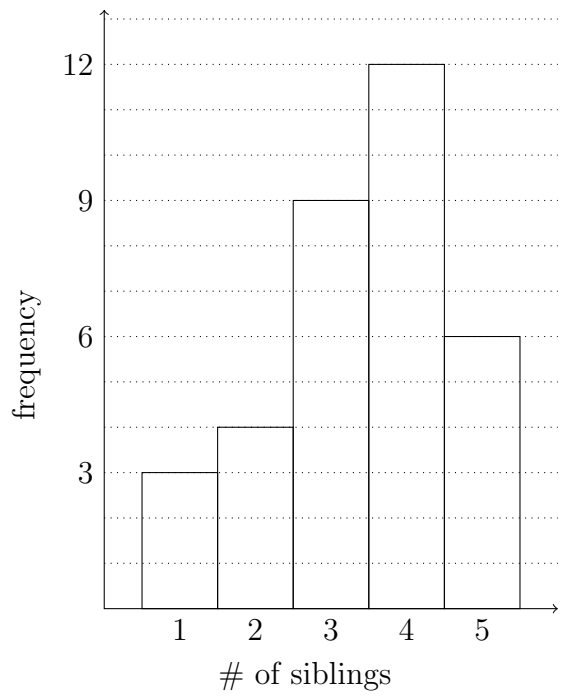
- a. What is the sample size? That is, how many volunteers were sampled?
- b. Find the median.
- c. Find the mode.
- d. Find the range.
- e. Find the first quartile and the third quartile.
- f. Draw a boxplot for the data.

Score:     /7

**Problem 2:** In Lily’s Fall 2024 courses, 12 students are locals, 26 are international, and 11 are from out of town. Draw a pie chart for the above data. Include your steps for the calculation of each sector angle and percentage in the pie chart.

Score:     /3

**Problem 3:** The histogram shown is a summary of a survey of the number of siblings (on the horizontal axis) a sample of students have in the budget travel club at Capilano University. Answer the following questions. Remember to include units when applicable.



- a. Find the number ( $n$ ) of students surveyed.
- b. Find the average number of siblings per student in the sample.
- c. Find the mode for the number of siblings per student in the sample.
- d. Find the median for the number of siblings per student in the sample.
- e. Find the variance and the standard deviation of the sample data.

Score:     /6