Algebra 1
Unit 10 – Project
Analyzing Data

Instructions: Answer **ALL** questions. You **MUST** attach all graph/sketches and show all calculations and/or explanations to justify your answers. If you are asked to provide a graph, you **MUST** use graph paper or a graphing utility/software. Upload the completed project as a Word or PDF file.

1. Use the data set given to answer the following questions.

7	5	8	15	4
9	10	1	12	8
13	7	11	8	10

   a. Make a line plot for the data. What information does the display reveal about the data set?

   b. Make a histogram for the data. What information does the display reveal about the data set?

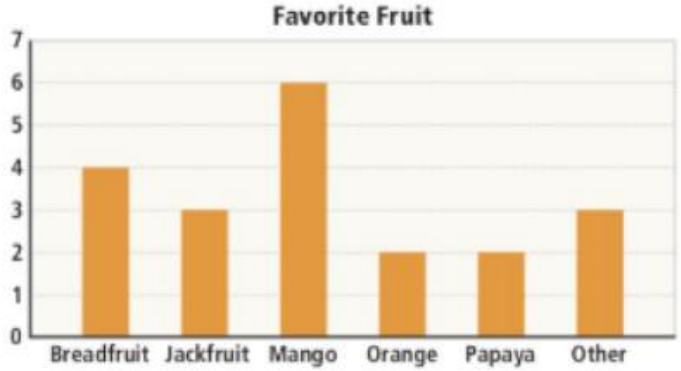
   c. Make a box plot for the data. What information does the display reveal about the data set?

   d. What is the median of the data set?

   e. How many data values are greater than 7?

   f. How many values fall in the interval 10 to 12?

2. Students in one freshman science class made a graph showing the results of a survey where they were asked to state their favorite fruit. Use the display to answer the following questions.



   a. What type of data is represented in the display? Explain.

b. How many students preferred either papayas or breadfruit?

c. Does the display show all of the students' favorite fruits? Explain.

d. There are a total of 72 students in all of the Freshman science classes. If their preferences are consistent with those in the class shown above, roughly how many students will say that mango is their favorite?

3. Two data sets and their lines of best fit are shown below. Describe the correlation for each data set. Use the residual plots to explain which correlation is stronger.