Name: _____   Date: _____
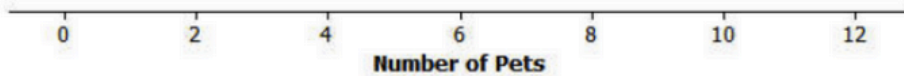
Math 620 –Types of Distributions: Homework

Example 1

Data Set 1: Pet owners
Students from River City High School were randomly selected and asked, "How many pets do you currently own?" The results are recorded below:

0	0	0	0	1	1	1	1	1	1	1	1	1	1	2
2	2	2	3	3	4	5	5	6	6	7	8	9	10	12

Make dot plot of the data set.

```
   |         |         |         |         |         |         |
   0         2         4         6         8        10        12
                        Number of Pets
```
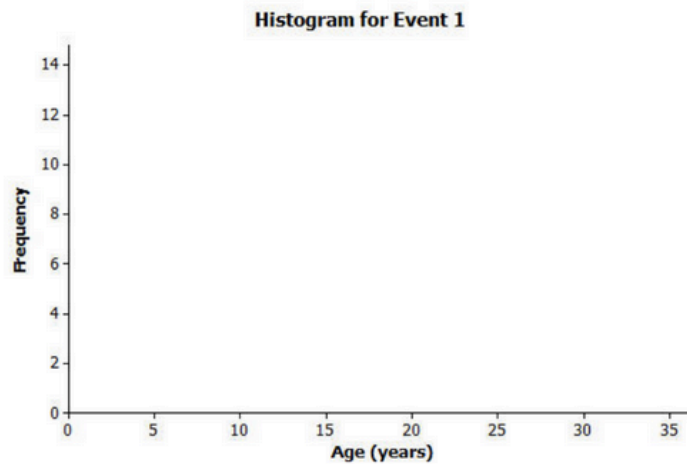
a) Describe the distribution of the number of pets owned by students at River City HS.

b) Calculate the mean number of pets owned by the 30 students from River City High School. Calculate the median number of pets owned by the thirty students.

c) What do you think is a typical number of pets for students from River City High School? Explain how you made your estimate.

Example 2 - Histograms: A graph of data that groups the data based on intervals and represents the data in each interval by a bar.

Twenty-five people were attending an event. The ages of the people are indicated below:

3, 3, 4, 4, 4, 4, 5, 6, 6, 6, 6, 6, 6, 6, 7, 7, 7, 7, 7, 7, 16, 17, 22, 22, 25

a. Create a histogram of the ages using the provided axes.

Histogram for Event 1

b. Would you describe your graph as symmetrical or skewed? Explain your choice.

c. Identify a typical age of the twenty-five people.

d. What event do you think the twenty-five people were attending? Use your histogram to justify your conjecture.