Mathematics

Power Standard 8:11

Pre-Formative Test

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour \_\_\_\_\_\_\_\_

1. Find the mean, median, and mode for the following set of rainfall amounts.

Round mean to tenths if necessary.

8.5, 9.4, 9.8, 8, 8.9, 10.1, 9.8

a. 9.2, 8, 9.8

b. 9.4, 9.4, 9.4

c. 9.8, 9.2, 9.4

d. 9.2, 9.4, 9.8

2. John earned the following by mowing lawns: $15, $20, $15, $25. If he

earns another $20, which of the following statements would be true?

1. the mode would not be affected
2. the mean would increase
3. the mean would decrease
4. the median would decrease
5. Find the range and the interquartile range for the following set of data: 8,9,9,12,19,17,16,16,14
6. range = 11, interquartile range = 7.5
7. range = 11, interquartile range = 7
8. range = 6, interquartile range = 7
9. range = 11, interquartile range = 8
10. Write a word problem about a real-world situation in which you could construct a histogram to solve a problem. Explain why the histogram would be helpful.
11. Explain two things you could do to the following set of data to construct a misleading graph:

9th grade: $400

10th grade: $275

11th grade: $300

12th grade: $250

1. Construct a set of data that has a mode of 8 and a median of 6.