NAME:_____

1. What does the standard deviation of a set of data tell you about the data?

2. Explain what a small standard deviation means.

3. Explain what a large standard deviation means.

4. Explain how to use a graphing calculator to calculate the standard deviation of a set of data.

5. Create a data set with at least 6 entries such that the standard deviation is 0.

6. Create a set of data that has a standard deviation of at least 2 but no more than 8. Compute the mean and standard deviation.

[1]   Answers may vary. Sample: the standard deviation is a measure of the variability of the data, of how much the data varies from the mean.

[2]   The data cluster around the mean.

[3]   The data spread out from the mean.

[4]   Choose STAT and EDIT to enter your data. Then choose STAT, CALC, and 1-VAR STATS to calculate. The standard deviation is indicated by the σ_x.

[5]   Answers may vary. Sample: 8, 8, 8, 8, 8, 8

[6]   Answers may vary. Sample: 18, 19, 20, 22, 23, 23, 23, 24, 26; mean: 22; standard deviation: 2.4