## Math 130 Day 2 Lecture Worksheet Measures of Center and Spread

Ex 1: Find the mean, median, mode, and midrange of the following data set...

12, 4, 15, 12, 10, 10, 12, 2, 19, 10, 4

Ex 2: Find the mean, median, mode, and midrange of the following data set...

23, 17, 8, 19, 4, 11, 31, 2

Ex 4: Find the range, standard deviation, and variance of the following data set...

23, 17, 8, 19, 4, 11, 31, 2

Ex 5: If the standard deviation of a data set is 9, what is the variance of the data set?

Ex 6: If the variance of a data set is 9, what is the standard deviation of the data set?

<u>Ex 7</u>: Suppose you have 2 data sets. Let  $s_1$  be the standard deviation of data set 1 and let  $s_2$  be the standard deviation of data set 2. If  $s_1 = 8.3$  and  $s_2 = 4.1$ , what can you say about the data sets?

Ex 8: Below are 2 data sets.

Data set 1: 755, 753, 756, 757, 751

Data set 2: 1, 3, 12, 76, 163

Let  $s_1$  be the standard deviation of data set 1 and let  $s_2$  be the standard deviation of data set 2. Without calculating them, which one is bigger:  $s_1$  or  $s_2$ ? Why?