Name: _____ Date: _____ **Unit 2 Class Work**

Calculating Standard Deviation Class Work

Objective: You will be able to calculate and interpret the standard deviation of a given data set.

Recall: Standard deviation is a measure of how each value in the data set varies, or deviates, from the mean.

To calculate standard deviation, we must…

- Calculate the mean of the data set.
- Calculate the difference between each value in the set and the mean.
- Square each difference.
- Determine the average of these squares.
- Take the square root of this average.

Guided Example:

1. The heights of three sunflower plants in a field are: 3.7 ft, 4.8 ft, & 5.0 ft.
Determine the standard deviation.

Find the mean: We already found the mean height yesterday to be _____ feet. ☺
(Find the sum of the values and divide by the number of elements in the set.)

Practice This Skill:

2. The scores of five students on a final exam were 79%, 83%, 95%, 80%, and 68%. Determine the standard deviation for the data set.

Describe the relationships between mean, standard deviation, and z-scores in your own words. Be ready to share. ☺

Write down any important idea relating to calculating standard deviation.