Topic 1: Standard deviation

• A quantity calculated to point out the extent of deviation for a group

as a whole.

• The Standard Deviation is a measure of how spread out numbers are.

• Its symbol is σ (the greek letter sigma)

• The Variance is defined as: The average of the squared differences from the Mean.

Standard deviation equation for an entire population:

𝝈 =

Standard deviation equation for a sample of a population:

=

𝝈, *S*: the standard deviation

x: each value in the population

: the mean of the values

N: the number of values (the population/the sample size)

Topic 2: Measure of change

• Ratio to percentage is the conversion procedure, which helps to convert

the ratio into a percentage.

• Ratio to percentage conversion helps us in obtaining accuracy in mixtures of

elements, or while calculating the percentage score in a test.

• Go through the following procedure to understand how to convert the ratio

to percentage:

• Step 1: First write the ratio a:b in the form of fraction a/b.

• Step 2: Multiply the fraction a/b by 100 to convert in terms of percentage.

• Step 3: Finally, add the percentage symbol (%) to the resultant value.

Formula : Percentage = Ratio × 100