

Standard deviation, like variance, is a measure of the variability or dispersion of a set of values.

Standard deviation is the square root of the variance.

$\sigma = \sqrt{\sigma^2}$ (for the population)

$s = \sqrt{s^2}$ (for the sample)

The difference between variance and standard deviation is in the use of different units. The standard deviation units are the same as the units in which the values of the variable are expressed.

In order to calculate the standard deviation, first calculate the variance and then extract the root of the variance.

Due to the smaller units (results are not squared), which are easier to interpret, in practice standard deviation is used more often than a variance.