Shelby Thomas

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Assignment 2

Formula for Standard Deviation(population): σ = √

Formula for Standard Deviation(sample): s= √

Formula for Variance(population): σ2=

Formula for Variance(sample): s2=

Standard Deviation is a statistic measuring the dispersion of a dataset relative to its mean and is calculated by taking the square root of the variance. Variance is a measure of dispersion or in simpler terms a measurement of the spread between numbers in a data set. There are different formulas for **population** and **sample** because, in a sample, we're estimating the variance or standard deviation of a larger population, while in a population we use the total number of data points because we have complete data.