

Statistics books often show two equations to compute the SD, one using n , and the other using $n-1$, in the denominator. Some calculators have two buttons.

The $n-1$ equation is used in the common situation where you are analyzing a sample of data and wish to make more general conclusions. The SD computed this way (with $n-1$ in the denominator) is your best guess for the value of the SD in the overall population.

If you simply want to quantify the variation in a particular set of data, and don't plan to extrapolate to make wider conclusions, then you can compute the SD using n in the denominator. The resulting SD is the SD of those particular values. It makes no sense to compute the SD this way if you want to estimate the SD of the population from which those points were drawn. It only makes sense to use n in the denominator when there is no sampling from a population, there is no desire to make general conclusions.