



## Variance

### Variance Formulas

Let's look at variance formulas.

The formula for the variance of a population is the mean of the squared differences from the mean, divided by the sample size

However, notice the slight difference for the variance formula for the sample. Notice that mu is replaced by Capital M, and then divided by the sample size minus 1. Remember the sample is just an estimate, so dividing by the sample size minus 1 gives a better estimate of variance of the larger population.