

Suppose the values below represent the weekly incomes. Consider the five values to be a **population**. ([Calculations found here](#)).

512 299 526 533 284

1. Calculate the population mean.
2. Generate each sample of two and calculate each sample's mean.
3. Generate the distribution and histogram of the sample means.
4. Calculate the expected value of $\bar{X}$. Does it equal the population mean, μ ?
5. Should the variance of your $\bar{X}$ observations equal $\frac{\sigma^2}{n}$?