## **STAMS - Statistics Package**

1. Mean

$$Mean = \frac{\sum_{i=1}^{n} x_i}{n}$$

2. Median

If the number of data points is odd:

$$Median = x_{\frac{n+1}{2}}$$

If the number of data points is even:

$$Median = \frac{x_{\underline{n}} + x_{\underline{n}+1}}{2}$$

3. Modus

Mode = value with the highest frequency

4. Population Variance  $(\sigma^2)$ 

$$\sigma^{2} = \frac{\sum_{i=1}^{N} (x_{i} - \mu)^{2}}{N}$$

5. Sample Variance  $(s^2)$ 

$$s^{2} = \frac{\sum_{i=1}^{n} (x_{i} - \bar{x})^{2}}{n-1}$$

6. Population Standard Deviation  $(\sigma)$ 

$$\sigma = \sqrt{\frac{\sum_{i=1}^{N} (x_i - \mu)^2}{N}}$$

7. Sample Standard Deviation (s)

$$s = \sqrt{\frac{\sum_{i=1}^{n} (x_i - \bar{x})^2}{n-1}}$$