

Microsoft Word and Excel Exercises

In order to practice absolute address, we try to calculate a sample variance by the following formula:

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

$$s^2 = \frac{\sum_{i=1}^n x_i^2 - \frac{\left(\sum_{i=1}^n x_i\right)^2}{n}}{n-1}$$

$$\text{standard deviation} = \sqrt{\text{sample variance}}$$

Exercise:

1. Compute \bar{x} , s^2 , and s for the following sample of 25 measurements:

7 6 6 11 8 9 11 9 10 8 7 7 5
9 10 7 7 7 7 9 12 10 10 8 6

2. Count the number of measurements in the intervals $\bar{x} \pm s$, $\bar{x} \pm 2s$, $\bar{x} \pm 3s$. Express each count as a percentage of the total number of measurements.
3. Draw the histogram of the data to see whether the set of data is normal distributed.