

frequency distribution.

mode = is the typical scenario of the situation or the highest occurrence.

here in a histogram

frequency

median = is the one in the middle

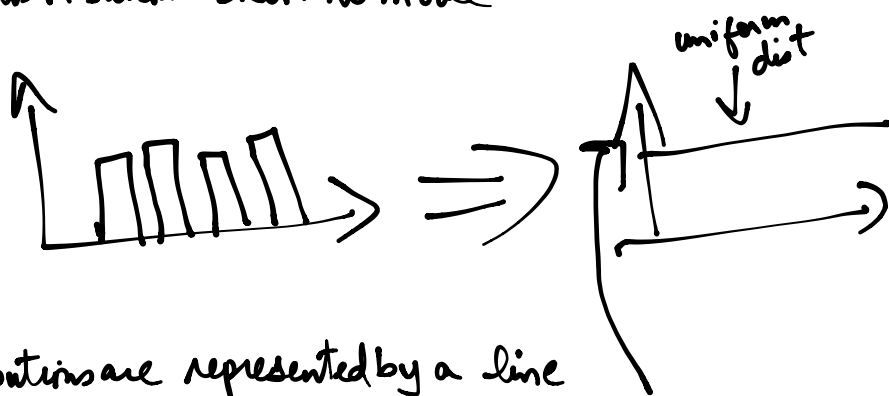
average:

These 3 variables will describe the typical salary of a person.  
In case of histogram consisting of a lot of values.

mode is a range of numbers and it lies in between these ranges.

\* Each bar of histogram is called bin.

\* Uniform distribution: have no mode



Uniform distributions are represented by a line

\* histograms with 2 bell curves have 2 distinct modes.



mode changes from the size of population hence for inferential analysis we use mean or the average.  $\bar{X}$  is mean

average/mean  $\bar{X} = \frac{\sum x}{n} \Rightarrow \mu = \frac{\sum X}{N}$

$\nwarrow$  samples                       $\nwarrow$  entire population

$\nwarrow$  sigma  $\rightarrow$  SD  
 Sum

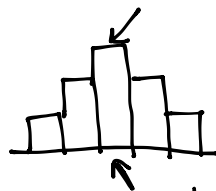
Outlier: 200, 300, 250, 10,000

The outlier 10,000 will make average misleading.

This is a outlier, it will skew the results

median: the middle value, it is useful when data is in an order.

normally distributed data: the data is equally distributed on both the sides of the bell curve.



mean = median = mode