Mean: when data items are close to each other, the figure which in genral represents all the data with its characteristics is called mean

It is the no. around which most data point lie. Unit same as observation

Mode: observation which corresponds to highest frequency in graph. Bimodal data/ undefined mode

Median: once data is arranged in increasing or decreasing order, the observation which divides the data in exactly equal parts

When considering mean/mode… we do not get an idea of distribution of the data points. So we have averages of 2nd order: range, quartile deviation, mean absoultue deviation, standard deviation

Two taken together gives correct idea

Gemoetirc mean: product of n values, to the nth rooth, average bacteria growth

Ogives cut at median

Range: highest-lowest. If units different in 2 different datasets,, no comparison can be done

Comparision can only be done, when data is unit free:

Coefficient of range: {h-l}/{h+l)

Std. deviation: root mean square deviation from mean: has unit of mean/ data ::gives on an average how far an observation lies from the mean,measures the sread of data

Sd does not change when there is a shift in the scale (if you add a constant)

If you multiply the constant, increases constant times the sd./root constant??

Coefficient of variation: sd./mean

Less is better

The coefficient of variation represents the ratio of the standard deviation to the mean, and it is a useful statistic for comparing the degree of variation from one data series to another, even if the means are drastically different from one another.

Average of average: harmonic mean

Correlation: concept that searches whether 2 variables have a relation among them

+ve corr: sympathetic corr

-ve: non-sympathetic

Covariance: (sum of product(xi-xbar)and yi-ybar), divded by n

Corr: cov/(sx\*sy)- unit free measure

Corr =-1: rate at which one variable increases, the same rate the other variable decreases









