



SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore - 641 107

An Autonomous Institution

Accredited by NBA - AICTE and Accredited by NAAC - UGC with 'A' Grade

Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai



DEPARTMENT OF MANAGEMENT STUDIES

COURSE NAME : 19BA106 FUNDAMENTALS OF DATA ANALYSIS

I YEAR /I SEMESTER

Unit 1 - EXPLORING DATA ANALYTICS

Topic 2: FDA - Descriptive statistics



Descriptive Statistics

- Descriptive statistics are used to describe the basic features of the data in a study.
- They provide simple summaries about the data.
- Descriptive statistics help us to simplify large amounts of data in a sensible way.



Descriptive Statistics

- Measures of Frequency – Count , Frequency and percentage.
- Measures of Central Tendency - Mean, Median, and Mode
- Measures of Dispersion or Variation - Range, Variance, Standard Deviation



Measures of Frequency – Count , Frequency and percentage.

- Count (n) - it is a count of how many items or "observations" you have.
- Frequency - the number of times the observation occurs in the data.
- Percentage - One of the most frequent ways to represent statistics is by percentage. Percent simply means "per hundred" and the symbol used to express percentage is %



Measures of Central Tendency - Mean, Median, and Mode

- The **mean** is the average of a data set.
- The median is the middle value when a data set is ordered from least to greatest.
- The mode is the number that occurs most often in a data set.



➤ Measures of Dispersion or Variation - Range, Variance, Standard Deviation

➤ **Range** - The Range is the difference between the lowest and highest values.

➤ **variance** measures variability from the average or mean

➤ **standard deviation** is a measure of the amount of variation or dispersion of a set of values. A low standard deviation indicates that the values tend to be close to the mean (also called the expected value) of the set, while a high standard deviation indicates that the values are spread out over a wider range.

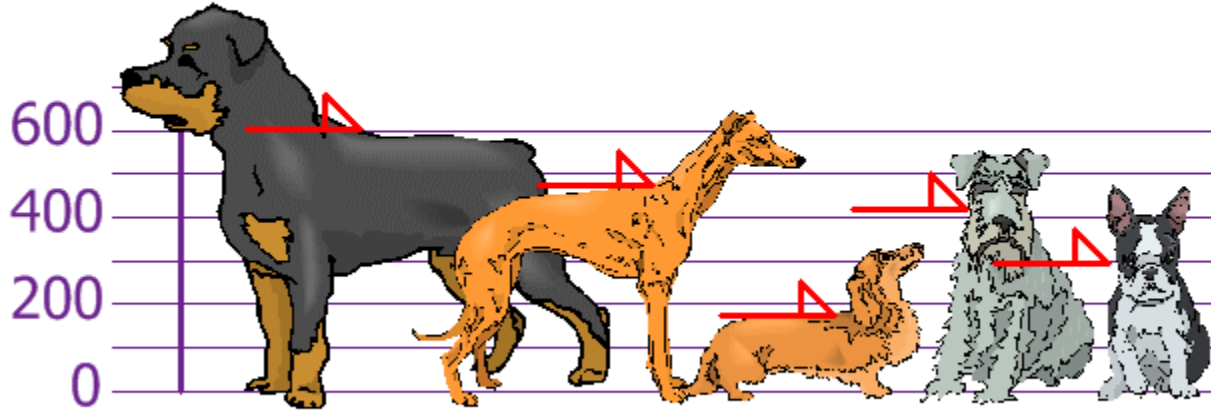


Data



Example

You and your friends have just measured the heights of your dogs (in millimetres):

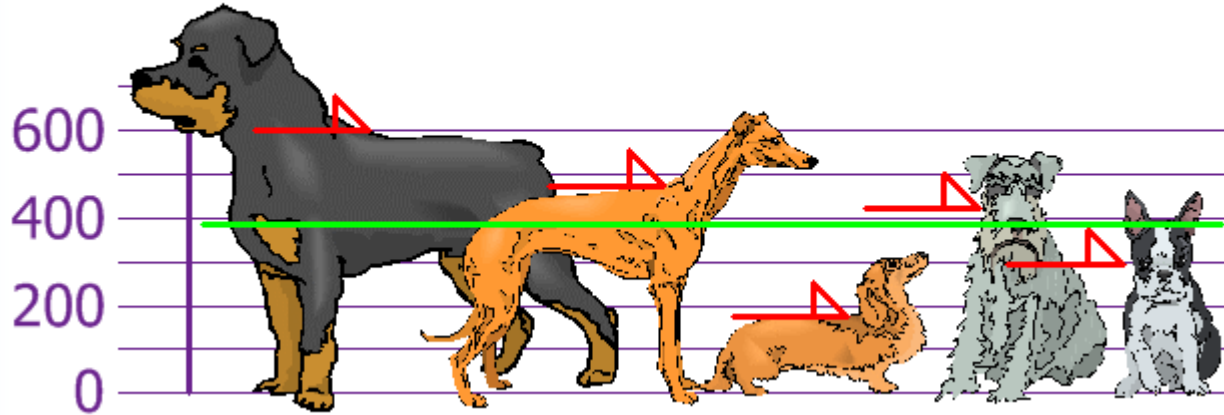


The heights (at the shoulders) are: 600mm, 470mm, 170mm, 430mm and 300mm.



Mean

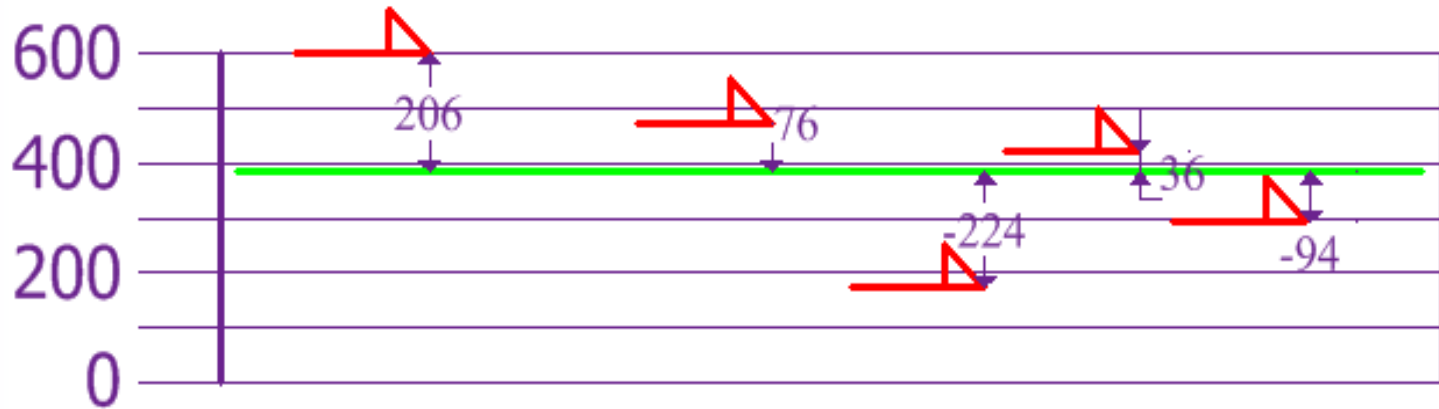
so the mean (average) height is 394 mm. Let's plot this on the chart:





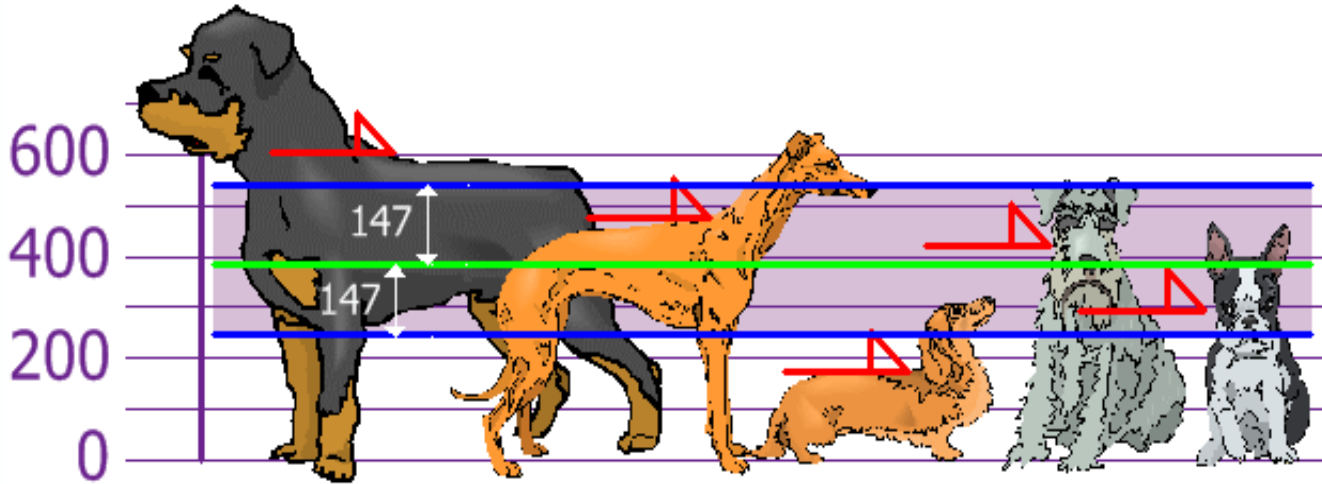
Variance

Now we calculate each dog's difference from the Mean:





Standard Deviation





RECAP

QUESTIONS???

THANK YOU

