MEASURES OF CENTRAL TENDENCY (AVERAGE)

Average:

Average is the single value which represents the characteristics of whole data set.

According to statistical.com

an average is the representative value of whole set of data.

The criteria of satisfactory average/good qualities of average

* Simple to understand
* Easy to interpret
* Easily and quickly calculated
* Based on all observation
* It explains the masses of all observation

Kinds of average

1 The Arithmetic mean/mathematical mean (ideal average)

2 The median => the average of location or position

Median means two parts of data

1. The Mode

Arithmetic means:

It is the sum of all observation divided by total numbers of its units is called Arithmetic Mean.

Formulas:

 =
 = Single series

 = = Discrete series

Find out the value of AM from the given data (ungroup)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| X: | 12 | 10 | 9 | 16 | 20 | 08 | 10 | 13 | 16 |

Solution:

 : 12 10 9 16 20 08 10 13 16 = 114

Formula of mean: =

 = = 12.6 answer.