

Mean ($\bar{X}$)

	INDIVIDUAL	DISCRETE	CONTINUOUS
Direct	$\bar{X} = \frac{\sum X}{N}$	$\bar{X} = \frac{\sum fX}{\sum f}$	$\bar{X} = \frac{\sum fm}{\sum f}$
Assumed mean or Short Cut.	$\bar{X} = A + \frac{\sum fd}{\sum f}$ ($d = X - A$)	$\bar{X} = A + \frac{\sum fd}{\sum f}$ ($d = X - A$)	$\bar{X} = A + \frac{\sum fd}{\sum f}$ ($d = m - A$)
Step Deviation	N/A	$\bar{X} = A + \frac{\sum fd'}{\sum f} \times i$ $d' = \frac{X - A}{i}$	$\bar{X} = A + \frac{\sum fd'}{\sum f} \times i$ $d' = \frac{m - A}{i}$

Median

Step I For all series first arrange the 'X' of series in ascending order.

<u>Step II</u>	Individual $Me = \left(\frac{N+1}{2}\right)^{th} \text{ item}$	Discrete $\left(\frac{N+1}{2}\right)$ find C.f	Continuous find C.f
<u>Step III</u>	—	$Me = \frac{N+1}{2}^{th} \text{ item through C.f}$	Find Me Class by $\left(\frac{N}{2}\right)^{th} \text{ item C.f}$

Step IV

$$M_c = l_1 + \frac{N/2 - C.f}{f} \times i$$

l_1 = lower limit
of med. class.

C.f = C.f of Previous
class.

f = f of Median
class

i = Class Interval
of Med. class

Mode

Method I

Individual

Observation

The value which
is appearing max. no.
of times

Disc

Observation

The value having
highest frequency

Cont

Observation:

The class having
highest frequency
is Modal class

$$M_o = l_1 + \frac{f_1 - f_0}{2f_1 - f_0 - f_2} \times i$$

N/A

Method II

Table Method

Table Method
Grouping Table

(2) Analysis Table

 l_1 = lower limit f_0 = f of Modal
class f_2 = f of next
Previous
class