Arithmetic mean

The arithmetic mean (A.M) or simply **the mean** or average of n observations $x_1, x_2, \ldots, x_n$ is defined to be the number x such that the sum of the deviations of the observations from x is 0. That is, the arithmetic mean x of n observations $x_1, x_2, \ldots, x_n$ is given by the equation

$(x_1 - x) + (x_2 - x) + \cdots + (x_n - x) = 0$ or $(x_1 + x_2 + \cdots + x_n) - n\,x = 0$

$Mean = [(x_1 + x_2 + \cdots + x_n)]/n$

1: Calculate the mean of the data 9, 11, 13, 15, 17, 19.

2. Compute the A.M. of the following data:

x	10	11	13	15	16	19
f	4	5	8	6	4	3

3. Calculate the A.M. for the following data:

Marks	80	85	90	95	100
No. of students	5	6	6	2	1

4. If A .M for the following data is 28 find x

Class Interval	0-10	10-20	20-30	30-40	40-50	50-60	
Marks	12	18	x	20	17	6	N=100

5. Find the median of 23, 25, 29, 30, 39.

6. Find the median of 3, 4, 10, 12, 27, 32, 41, 49, 50, 55, 60, 63, 71, 75, 80.

7. Find the median of 29, 23, 25, 29, 30, 25, 28.

8. Calculate the median of the following table:

Variable (x)	5	10	15	20	25	30
Frequency(f)	3	6	10	8	2	3

9. Find the mode of 7, 4, 5, 1, 7, 3, 4, 6,7.

10. Find the mode for 12, 15, 11, 12, 19, 15, 24, 27, 20, 12, 19, 15.

11. Find the mode from the following frequency table:

Wage	45	50	55	60	65	70	75
No. of Employees	12	11	14	13	12	10	9

12. Compute the A.M. of the following data

Compute the A.M. of the following data: ***x***	10	11	13	15	16	19
f	4	5	8	6	4	3