

**WANDOOR GANITHAM SSLC MATHEMATICS STUDY MATERIAL : 2023**  
**POLYNOMIALS**

**QUESTION -1**

- a) Compute the mean and median of the first 35 natural numbers .
- b) Compute the mean and median of the first 50 even numbers .
- c) Compute the mean and median of the natural numbers which leave remainder 1 on division by 2 .
- d) Compute the mean and median of the first 25 terms of the arithmetic sequence 5 , 10 , 15 . . . .

**QUESTION -2**

The weights of members in a cricket club are given ( in kilograms ) below .

53 , 40 , 48 , 55 , 49 , 45 , 47 , 56 , 54 , 52 , 51

- a) What is the mean weight ?
- b) What is the median weight ?

**QUESTION - 3**

The marks obtained by 10 students in the Maths exam are given below .

64 , 39 , 58 , 80 , 43 , 37 , 50 , 76 , 61 , 72

- a) What is the mean mark ?
- b) What is the median mark ?

**QUESTION - 4**

51 households in a neighbourhood are sorted according to their monthly income in the table below .

Monthly income (Rs )	Number of households
5000	4
5500	6
6000	8
7000	10
8000	9

8500	7
9000	5
9500	2

- a) If the households are arranged in increasing order of monthly income , what is the monthly income of the household at the 19<sup>th</sup> position ?
- b) If the households are arranged in increasing order of monthly income , the monthly income of the household at what position is taken as the median ?
- c) Find the median of the monthly income .

**QUESTION - 5**

The table below shows the workers in a factory sorted according to their daily wages .

Daily wages (Rs)	Number of workers
900	6
1000	4
1100	7
1200	8
1300	7
1400	5
1500	3

- a) If the workers are arranged in increasing order of daily wage , what is the daily wage of the worker at the 18<sup>th</sup> position ?
- b) If the workers are arranged in increasing order of daily wage , the daily wage of the worker at what position is taken as the median ?
- c) Find the median daily wage .

**QUESTION - 6**

The table below shows the children in a class sorted according to their marks in Maths exam.

Marks	Number of students
0 – 10	3
10 – 20	5
20 – 30	8
30 – 40	9
40 – 50	10
50 – 60	7
60 – 70	6
70 – 80	5
80 – 90	2

- a) If the students are arranged in increasing order of marks , the mark of the student at what position is taken as the median ?
- b) If the students are arranged in increasing order of marks , what is assumed to be the mark of the student at the 26<sup>th</sup> position ?
- c) Find the median mark .

**QUESTION - 7**

71 households in a neighbourhood are sorted according to their monthly income in the table below .

Monthly income (Rs )	Number of households
3000 - 4000	8
4000 - 5000	10
5000 - 6000	20
6000 - 7000	12
7000 - 8000	8
8000 - 9000	5

- a) If the households are arranged in increasing order of monthly income , the monthly income of the household at what position is taken as the median ?
- b) If the households are arranged in increasing order of monthly income , what is assumed to be the monthly income of the household at the 19<sup>th</sup> position ?
- c) Find the median of the monthly income .

### **QUESTION - 8**

The table shows some households sorted according to their usage of electricity .

<b>Electricity usage ( units )</b>	<b>Number of households</b>
<b>80 – 90</b>	<b>4</b>
<b>90 – 100</b>	<b>4</b>
<b>100 – 110</b>	<b>5</b>
<b>110 – 120</b>	<b>5</b>
<b>120 – 130</b>	<b>6</b>
<b>130 – 140</b>	<b>6</b>

- a) If the households are arranged in increasing order of usage of their electricity , half the sum of the usage of the households at what positions are taken as the median ?
- b) If the households are arranged in increasing order of usage of their electricity , what is assumed to be the usage of the household at the 14<sup>th</sup> position ?
- c) Find the median usage .