**IQR**

1. Find the interquartile range of set( 0,1,1,2,3,3,7,9,11,15,19).
2. Determine IQR from five – number summary. LV=5.8, LQ= 6.2, Median = 10.1, UP=25, Highest value= 40.
3. Calculate the IQR of results of students (12, 23, 12, 34, 54, 13, 7) in statistics.
4. Calculate the Lower quartile if Median= 45, IQR = 35, UQ=65.
5. Find the interquartile range for the list of values 17, 20, 22, 22, 24, 24, 30, 45.
6. Calculate the Upper quartile of the Heights of plants in cm (4.5, 6, 5.5, 7, 9.7, 4 ).
7. Calculate the semi interquartile range of 10 first prime numbers.
8. Find the LQ,UP,IQR, for the range of given data (2,1,,9,0,2,3,5,6).
9. Find the IQR, mode, median. For the marks obtained by 55 students in class.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Marks | 25 | 35 | 45 | 55 | 65 |
| frequency | 14 | 17 | 11 | 8 | 5 |

1. Find the Five number summary for the given dataset.

(2,4,6,6,7,8,12,6,12).

**Standard Deviation**

1. Calculate the standard deviation for the first 7 multiplies of 6 .
2. If the standard deviation is 35, and if we add 4 to each observation, then what is the new variance of resulting observation?
3. Find the std. deviation of 2, 10, 0, 7, 6 , 6 ,0.
4. Calculate the standard deviation for the following data.

|  |  |
| --- | --- |
| Salary (k) | No. of employees |
| 5-10 | 3 |
| 10-15 | 2 |
| 15-20 | 2 |
| 20-25 | 5 |
| 25-30 | 1 |

1. Find the standard deviation of student marks in statistics.

9, 25, 10, 11, 12, 13.

1. If the variance of certain distribution is 12 then its standard deviation is.
2. What is the standard deviation of first five positive integers?
3. In the class of 50 students, 5 students were randomly chosen and their final evaluation score recorded as 912,982,436 and 789. Determine the standard deviation.
4. Find the standard deviation for odd numbers between ( 20 – 30).
5. During survey 6 workers asked how many hours per day they work on an average?

The answers were as 6,7,5,9,8,10. Calculate mean and standard deviation.

**Variance**

1. Find out the variance of given values 0,3 , 6, 9, 12, 15.
2. A student scores mark in 7 subject are 48,52,73,36,66,71,24. Then find the variance.
3. Calculate the variance of ungrouped data (3, 9, 4, 6, 5).
4. Calculate the variance of data

|  |  |
| --- | --- |
| Marks | No. of students |
| 0-10 | 2 |
| 10-20 | 3 |
| 20-30 | 4 |
| 30-40 | 5 |
| 40-50 | 6 |

1. Find the variance of 12,13,14,15, 16, 17.
2. What is variance of first five positive integers.
3. Calculate the variance of first 10 Fibonacci numbers.
4. If the standard deviation of data is 0.0123. Find the variance
5. Find the variance of first 10 odd numbers
6. A batsman scores runs in 10 innings as 40, 70, 50, 66, 62, 55, 45, 41, 69, 51. Find the variance.