

VANI VIDYALAYA SENIOR SECONDARY AND JUNIOR COLLEGE
CLASS:IX **WORKSHEET-8 (2022-23)**
SUBJECT: MATHEMATICS **CH.14 STATISTICS.**

1. In a frequency distribution, the mid value of a class is 10 and the width of the class is 6. Find the lower limit of the class.
2. If m is the mid-point and l is the upper class limit of a class in a continuous frequency distribution, then what is the lower limit of the class.
3. The width of each of five continuous classes in a frequency distribution is 5 and the lower class limit of the lowest class is 10. Compute the upper class limit of the highest class.
4. The daily maximum temperatures (in degree celsius) recorded in a certain city during the month of November are as follows:
25.8, 24.5, 25.6, 20.7, 21.8, 20.5, 20.6, 20.9, 22.3, 22.7, 23.1, 22.8, 22.9, 21.7, 21.3,
20.5, 20.9, 23.1, 22.4, 21.5, 22.7, 22.8, 22.0, 23.9, 24.7, 22.8, 23.8, 24.6, 23.9, 21.1
Represent them as a frequency distribution table with class size 1°C .

| | | | | | | | | |
|----|---|---------|---------|---------|---------|---------|---------|---------|
| 5. | Draw a histogram and frequency polygon to represent the following data which shows the monthly cost of living index of a city in a period of 2 years. | | | | | | | |
| | Cost of living index: | 460-480 | 480-500 | 500-520 | 520-540 | 540-560 | 560-580 | 580-600 |
| | No.of months: | 4 | 3 | 5 | 3 | 2 | 1 | 4 |

6. Following table gives the distribution of students of sections A and B of a class according to the marks obtained by them.

| Section A | | Section B | |
|-----------|-----------|-----------|-----------|
| Marks | Frequency | Marks | Frequency |
| 0 – 15 | 5 | 0 – 15 | 3 |
| 15 – 30 | 12 | 15 – 30 | 16 |
| 30 – 45 | 28 | 30 – 45 | 25 |
| 45 – 60 | 30 | 45 – 60 | 27 |
| 60 – 75 | 35 | 60 – 75 | 40 |
| 75 – 90 | 13 | 75 – 90 | 10 |

Represent the marks of the students of both the sections on the same graph by two frequency polygons. What do you observe?

7. Represent the following data by means of histogram.

| Weekly wages (in Rs.) | No. of Workers (Frequency) |
|-----------------------|----------------------------|
| 0-15 | 7 |
| 15-20 | 9 |
| 20-25 | 8 |
| 25-30 | 5 |
| 30-40 | 12 |
| 40-60 | 12 |
| 60-80 | 8 |

8.
(A)

A charity surveys the people of a village for their haemoglobin counts. 25 out of 100 adult females in the village were tested. The result is given in this table.

| Haemoglobin (mg/dl) counts | No. of females |
|----------------------------|----------------|
| 5 | 3 |
| 6 | 3 |
| 7 | 2 |
| 8 | 5 |
| 9 | 1 |
| 10 | 1 |
| 11 | 3 |
| 12 | 4 |
| 13 | 2 |
| 14 | 1 |

- A haemoglobin counts below 12 is considered deficient. What proportion of females in the survey can be considered deficient?
- What is the median haemoglobin counts (mg/dl) of the females in the survey?
- Divya said that 8 and 12 are the most observed haemoglobin counts (mg/dl) among 25 females. Krishna said that 8 and 12 are the most observed haemoglobin counts (mg/dl) among 100 females in the village. Who is correct? Explain your answer.

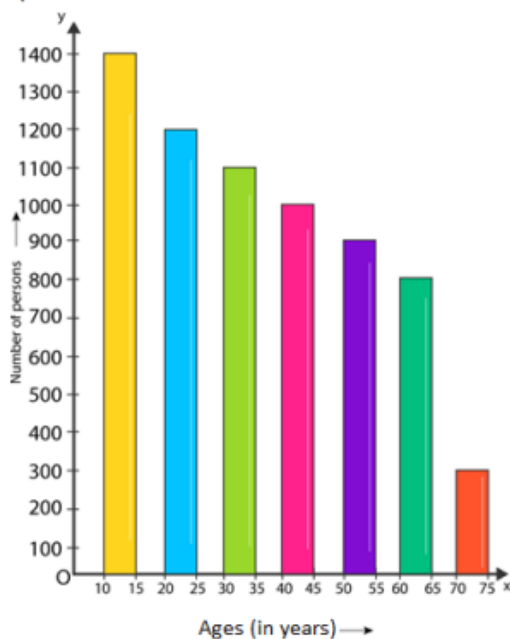
(B)

The following data given is the weight (in grams) of 30 oranges picked from a basket: 106, 107, 76, 109, 187, 95, 125, 92, 70, 139, 128, 100, 88, 84, 99, 113, 204, 141, 136, 123, 90, 115, 110, 97, 90, 107, 75, 80, 118, 82.

- Draw Frequency distribution table.
- Class size of the data
- Range of the data
- Class Mark of the fourth class
- Find number of oranges whose weight is less than 100g

9.

A healthcare survey was done by the state health and family welfare care board of the state of Punjab. The data is collected by forming age groups; i.e; 10-15, 20-25 and so on. The overall data from a town is given below in the form of a bar graph. Read the data carefully and answer the questions that follow.



| | |
|-----|---|
| | <p>i. What is the percentage of the youngest age-group persons over those in the oldest age group?</p> <p>a. 400.56%</p> <p>b. 466.67%</p> <p>c. 500%</p> <p>d. 500.67%</p> <p>ii. What is the total population of the town?</p> <p>a. 6800</p> <p>b. 7000</p> <p>c. 6700</p> <p>d. 6600</p> <p>iii. How many persons are more in the age-group 10-15 than in the age group 30-35?</p> <p>a. 100</p> <p>b. 200</p> <p>c. 250</p> <p>d. 300</p> <p>iv. What is the age-group of exactly 1200 persons living in the town?</p> <p>a. 20-25</p> <p>b. 10-15</p> |
| 10. | <p>A total of 25 patients admitted to a hospital are tested for levels of blood sugar (mg/dl) and the results obtained were as follows:</p> <p>87, 71, 83 ,67 ,85,77, 69 ,76, 65, 85,85, 54, 70 ,68, 80,73, 78, 68, 85 ,73,81, 78 ,81 ,77, 75.</p> <p>Find mean, median and mode (mg/dl) of the above data.</p> |