

## EXERCISE 9.1

PAGE NO: 192

1. In a Mathematics test, the following marks were obtained by 40 students. Arrange these marks in a table using tally marks.

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| 8 | 1 | 3 | 7 | 6 | 5 | 5 | 4 | 4 | 2 |
| 4 | 9 | 5 | 3 | 7 | 1 | 6 | 5 | 2 | 7 |
| 7 | 3 | 8 | 4 | 2 | 8 | 9 | 5 | 8 | 6 |
| 7 | 4 | 5 | 6 | 9 | 6 | 4 | 4 | 6 | 6 |

(a) Find how many students obtained marks equal to or more than 7.

(b) How many students obtained marks below 4?

**Solutions:**

| Marks | Tally Marks | Number of Students |
|-------|-------------|--------------------|
| 1     |             | 2                  |
| 2     |             | 3                  |
| 3     |             | 3                  |
| 4     |             | 7                  |
| 5     |             | 6                  |
| 6     |             | 7                  |
| 7     |             | 5                  |
| 8     |             | 4                  |
| 9     |             | 3                  |

(a) The students who got marks equal to or more than 7 are the students who got marks as either of 7, 8 and 9. Therefore number of these students

$$= 5 + 4 + 3$$

$$= 12$$

(b) The students who got marks below 4 are the students who got marks as either of 1, 2 and 3.

Therefore number of these students are

$$= 2 + 3 + 3$$

$$= 8$$

2. Following is the choice of sweets of 30 students of Class VI.

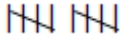



Ladoo, Barfi, Ladoo, Jalebi, Ladoo, Rasgulla, Jalebi, Ladoo, Barfi, Rasgulla, Ladoo, Jalebi, Jalebi, Rasgulla, Ladoo, Rasgulla, Jalebi, Ladoo, Rasgulla, Ladoo, Ladoo, Barfi, Rasgulla, Rasgulla, Jalebi, Rasgulla, Ladoo, Rasgulla, Jalebi, Ladoo.

(a) Arrange the names of sweets in a table using tally marks.

(b) Which sweet is preferred by most of the students?

**Solutions:**

By observing the choice of sweets of 30 students. We may construct the table as shown below:

| Sweets   | Tally Marks   | Number of Students |
|----------|---|--------------------|
| Ladoo    |  | 11                 |
| Barfi    |  | 3                  |
| Jalebi   |  | 7                  |
| Rasgulla |  | 9                  |
|          |   | 30                 |

(b) The highest number of students preferred Ladoos. Hence, Ladoo is the most preferred sweet among students.

3. Catherine threw a dice 40 times and noted the number appearing each time as shown below :

|   |   |   |   |   |   |   |   |   |   |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 3 | 5 | 6 | 6 | 3 | 5 | 4 | 1 | 6 |
| 2 | 5 | 3 | 4 | 6 | 1 | 5 | 5 | 6 | 1 |
| 1 | 2 | 2 | 3 | 5 | 2 | 4 | 5 | 5 | 6 |
| 5 | 1 | 6 | 2 | 3 | 5 | 2 | 4 | 1 | 5 |





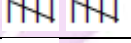

Make a table and enter the data using tally marks. Find the number that appeared.

(a) The minimum number of times

(b) The maximum number of times

(c) Find those numbers that appear an equal number of times.

**Solutions:**






























| Numbers | Tally Marks   | Number of times |
|---------|---|-----------------|
| 1       |  | 7               |
| 2       |  | 6               |
| 3       |  | 5               |
| 4       |  | 4               |
| 5       |  | 11              |
| 6       |  | 7               |

(a) The number that occurred for minimum number of times is 4

(b) The number that occurred for maximum number of times is 5

(c) 1 and 6 are the numbers that appear an equal number of times.

4. Following pictograph shows the number of tractors in five villages.

| Village   | Number of tractors  - 1 Tractor   |
|-----------|--|
| Village A |        |
| Village B |       |
| Village C |         |
| Village D |     |
| Village E |        |

Observe the pictograph and answer the following questions.

- Which village has the minimum number of tractors?
- Which village has the maximum number of tractors?
- How many more tractors village C has as compared to village B.
- What is the total number of tractors in all the five villages?

**Solutions:**

(i) Village D has the minimum number of tractors.

(ii) Village C has the maximum number of tractors.

(iii) Village B has 5 tractors

Village C has 8 tractors


































$$= 8 - 5$$

$$= 3 \text{ tractors}$$

Village C has 3 more tractors as compared to village B

(iv) Total number of tractors in all the villages =  $6 + 5 + 8 + 3 + 6 = 28$  tractors

**5. The number of girl students in each class of a co-educational middle school is depicted by the pictograph:**

| Classes | Number of girl students  - 4 Girls   |
|---------|---|
| I       |       |
| II      |        |
| III     |        |
| IV      |       |
| V       |      |
| VI      |       |
| VII     |      |
| VIII    |     |

Observe this pictograph and answer the following questions:













































- (a) Which class has the minimum number of girl students?  
 (b) Is the number of girls in Class VI less than the number of girls in Class V?  
 (c) How many girls are there in Class VII?

**Solutions:**

By observing the above table, there are 24, 18, 20, 14, 10, 16, 12 and 6 girls respectively from class I to VIII

- (a) Class VIII has only 6 girls. Therefore, the minimum number of girl students are in Class VIII  
 (b) No. Class V has 10 girl students  
     Class VI has 16 girl students  
     Hence, the number of girls in Class VI are more than the number of girls in Class V  
 (c) The number of girls in Class VII are 12

**6. The sale of electric bulbs on different days of a week is shown below:**

| Days      | Number of electric bulbs  |  - 2 Bulbs |
|-----------|---|---|
| Monday    |         |   |
| Tuesday   |           |   |
| Wednesday |       |   |
| Thursday  |       |   |
| Friday    |          |   |
| Saturday  |       |   |
| Sunday    |          |   |










































Observe the pictograph and answer the following questions:

- (a) How many bulbs were sold on Friday?  
 (b) On which day were the maximum number of bulbs sold?  
 (c) On which of the days same number of bulbs were sold?  
 (d) On which of the days minimum number of bulbs were sold?  
 (e) If one big carton can hold 9 bulbs. How many cartons were needed in the given week?

**Solutions:**

- (a) Number of bulbs sold on Friday are 14 bulbs.  
 (b) On Sunday highest number of bulbs i.e 18 are sold. Thus maximum number of bulbs were sold on Sunday.  
 (c) On Wednesday and Saturday 8 bulbs are sold. Hence equal number of bulbs were sold on Wednesday and Saturday.  
 (d) Minimum number of bulbs were sold on Wednesday and Saturday i.e 8 bulbs.  
 (e) Total number of bulbs sold in a week =  $12 + 16 + 8 + 10 + 14 + 8 + 18 = 86$

**7. In a village six fruit merchants sold the following number of fruit baskets in a particular season:**

| Name of Fruit marchent | Number of fruit baskets  - 100 fruit baskets  |
|------------------------|--|
| Rahim                  |      |
| Lakhan pal             |        |
| Anwar                  |         |
| Martin                 |           |
| Ranjit singh           |           |
| Joseph                 |       |

Observe this pictograph and answer the following questions:

(a) Which merchant sold the maximum number of baskets?

(b) How many fruit baskets were sold by Anwar?

(c) The merchants who have sold 600 or more number of baskets are planning to buy a godown for the next season. Can you name them?

**Solutions:**

From the pictograph, the number of fruit baskets sold by Rahim, Lakhanpal, Anwar, Martin, Ranjit Singh and Joseph are 400, 550, 700, 950, 800 and 450 respectively

(a) Martin sold the maximum number of fruit baskets i.e 950

(b) Anwar sold 700 fruit baskets

(c) Anwar, Martin and Ranjit Singh are the merchants who sold more than 600 fruit baskets. Hence, these are the merchants who are planning to buy a godown for the next season.