TABULAR AND GRAPHICAL REPRESENTATION OF DATA

- Tabular representation of data
- Graphical representation of data

    o Line diagram
    o Bar diagram
    o Frequency polygon
    o Pie chart

- Frequency distribution table
- Histogram
- Ogive

Q1. The following data represent the number of days of sick leave taken by each of 50 workers of a given company over the last 6 weeks:

2,2,0,0,5,8,3,4,1,0,0,7,1,7,1,5,4,0,4,0,1,8,9,7,0,
1,7,2,5,5,4,3,3,0,0,2,5,1,3,0,1,0,2,4,5,0,5,7,5,1

a. How many workers had at least one day of sick leave?
b. How many workers had between 3 to 5 days of sick leave?
c. How many had more than 5 days of sick leave?

Ans.

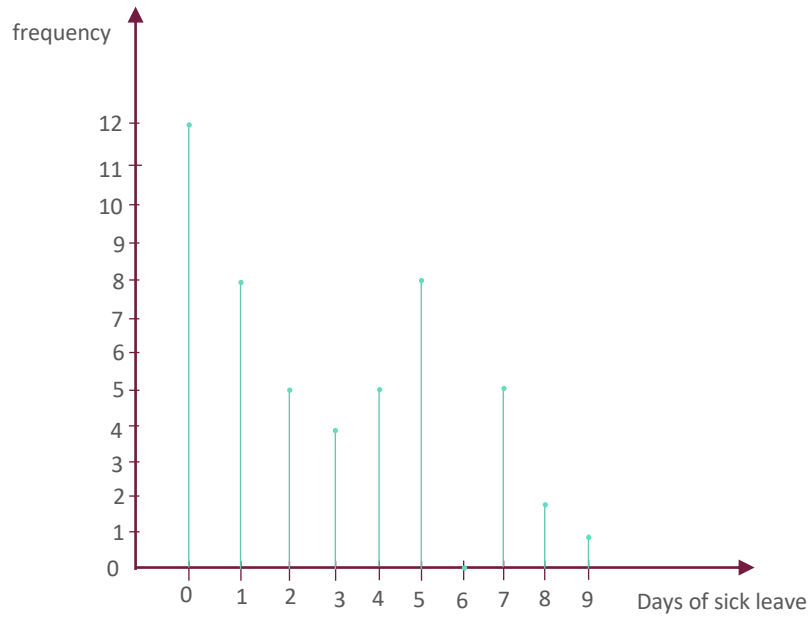| VALUE	FREQUENCY	VALUE	FREQUENCY
0	12	5	8
1	8	6	0
2	5	7	5
3	4	8	2
4	5	9	1

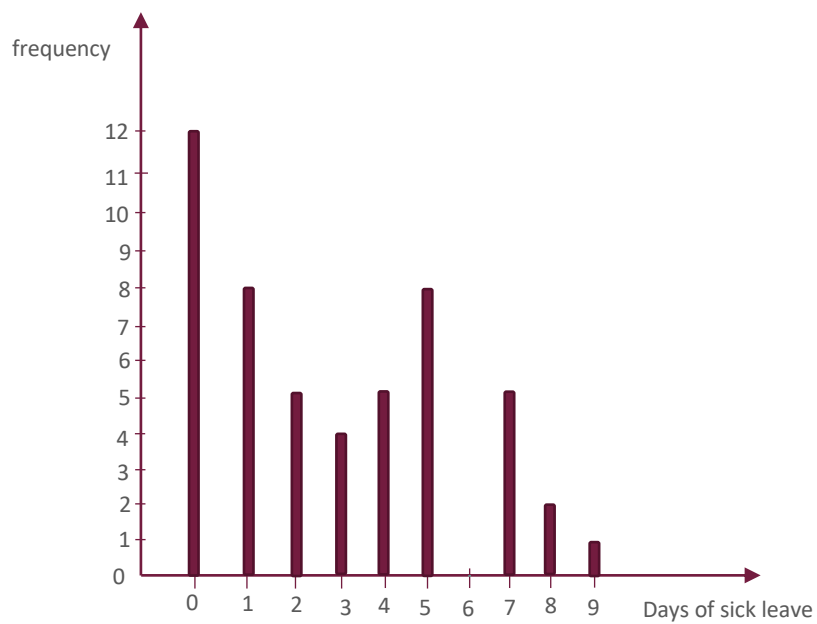a. 12 workers didn't take a sick leave. No of workers who had at least one sick day

   => 50-12 = 38.

b. 4 + 5 + 8 = 17
c. 0 + 5 + 2 +1 = 8

Q2. Use the above frequency table to graphically represent the line diagram, bar diagram and frequency polygon.
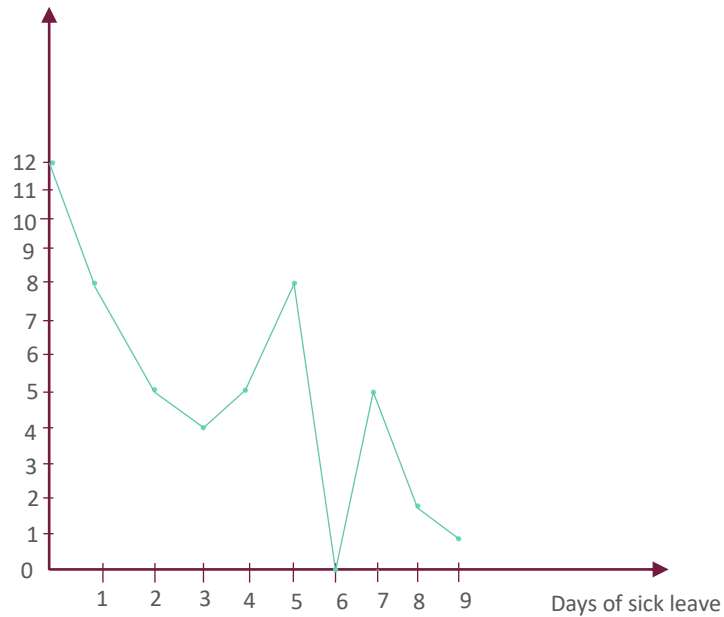
LINE DIAGRAM

BAR GRAPH

FREQUENCY POLYGON

Q1. The following data represent the sizes of 30 families that reside in a small town

5, 13, 9, 12, 7, 4, 8, 6, 6, 10, 7, 11, 10, 8, 15, 8, 6, 9, 12, 10, 7, 11, 10, 8, 12, 9, 7, 10, 7, 8

1. Construct a frequency table for these data.
2. Using a line graph, plot the data.
3. Plot the data as a frequency polygon.

Q2. The following data represent the marks of 20 students

8,12,15,4,0,19,15,13,8,18,10,12,19,19,15,0,5,12,6,15

1. Construct a frequency table for these data.
2. Using a line graph, plot the data.
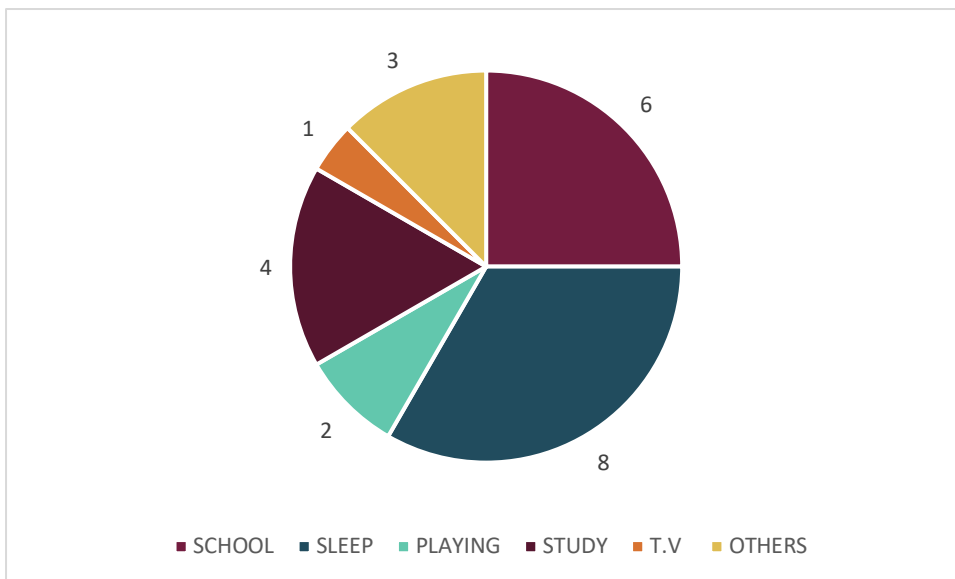3. Plot the data as a frequency polygon.

PIE CHART

Q. The following table shows the number of hours spend by a child on various events on a weekday.

ACTIVITY	NO. OF HOURS
School	6
Sleep	8
Playing	2
Study	4
T.V	1
Others	3

Ans.

ACTIVITY	NO. OF HOURS	MEASURE OF CENTRAL ANGLE
School	6	$(^6/_{24}*360) = 90°$
Sleep	8	$(^8/_{24}*360) = 120°$
Playing	2	30°
Study	4	60°
T.V	1	15°
Others	3	45°

Q. The following table shows the number of hours spend by a child on various events on a weekday.

Q1. Following table shows the favourite sport of 80 students. Make a pie chart for the given data.

Sport	No of students
Badminton	41
Tennis	9
Swimming	23
Volleyball	7

Q2. The given table shows the percentage of favourite flavours of children in a locality. Draw a pie chart for the given table.

Flavours	% of children liking the flavour
Chocolate	25%
Vanilla	15%
Strawberry	10%
Choco mint	30%
Black current	20%