



**SpeedLabs**

**MATHS**

**CBSE 8<sup>th</sup>**

**TEEVRA EDUTECH PVT. LTD.**

**Q.1** For which of these would you use a histogram to show the data?

- (a) The number of letters for different areas in a postman's bag.
- (b) The height of competitors in an athletics meet.
- (c) The number of cassettes produced by 5 companies.
- (d) The number of passengers boarding trains from 7:00 a.m., to 7:00 p.m., at a station.

Give reasons for each.

**Sol:** As we know histogram is a graphical representation of data, if data represented in manner of class-interval.

- (a) For case (b) and case (d). In all these cases data can be divided into class intervals.

So we use histogram.

For example, a group of competitors having different heights in an athletics meet.

- (d) The number of passengers boarding trains in an interval of one hour at a station.

**Q.2** The shoppers who come to a departmental store are marked as:

man (M), woman (W), boy (B) or girl (G).

The following list gives the shoppers who came during the first hour in the morning.

WWWGBWWMGGMMWWWGMBWBGGMWMMWWWMBWGMWWWGWMMWM

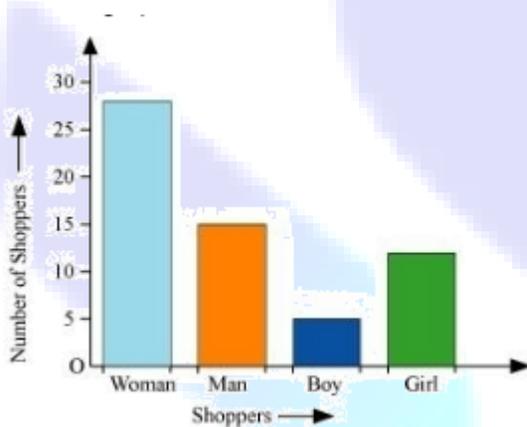
WGWMGWMMBGGW.

Make a frequency distribution table using tally marks. Draw a bar graph to illustrate it.

**Sol:** We tabulate the data in frequency distribution table:

Shopper	Tally marks	Number
W		28
M		15
B		5
G		12

Now, to illustrate the data by drawing bar-graph:



**Q.3** The weekly wages (in Rs) of 30 workers in a factory are.

830,835,890,810,835,836,869,845,898,890,820,860,  
832,833,855,845,804,808,812,840,885,835,835,836,  
878,840,868,890,806,840.

Using tally marks make a frequency table with

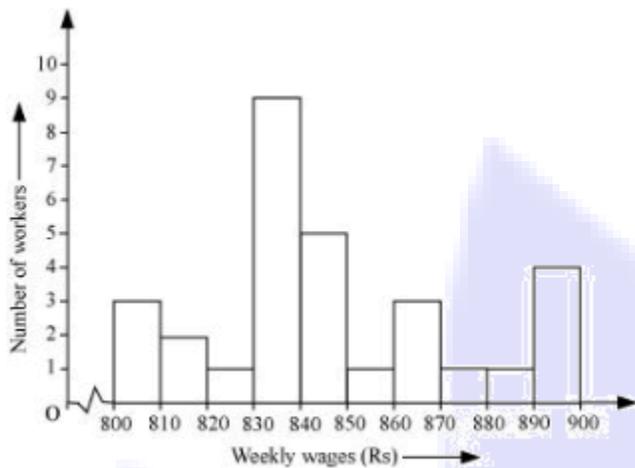
Intervals as 800-310,810-820 and so on.

**Sol:** We represented the data by frequency distribution table using tally marks:

Interval	Tally marks	Frequency
800 - 810		3
810 - 820		2
820 - 830		1
830 - 840		9
840 - 850		5
850 - 860		1
860 - 870		3
870 - 880		1
880 - 890		1
890 - 900		4

**Q.4:** Draw a histogram for the frequency table made for the data in Question 3, and answer the following questions.

- (i) Which group has the maximum number of workers?
- (ii) How many workers earn Rs 850 and more?
- (iii) How many workers earn less than Rs 850?

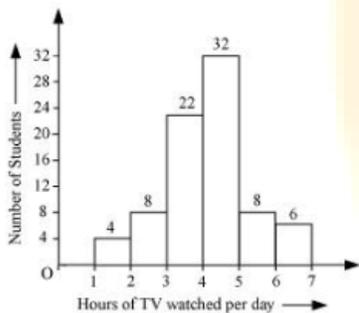


**Sol:**

- (i) 830-840 group has the maximum number of workers.
- (ii) 10 workers earn more than Rs 850.
- (iii) 20 workers earn less than Rs 850.

**Q.5** The number of hours for which students of a particular class watched television during holidays is shown through the given graph. We draw the histogram for above frequency table: Answer the following.

- (i) For how many hours did the maximum number of students watch T.V.?
- (ii) How many students watched TV for less than 4 hours?
- (iii) How many students spent more than 5 hours in watching TV?



**Sol:**

(i) The maximum number of students watched T.V. for 4 – 5 hours.

(ii) 34 students watched TV for less than 4 hours.

(iii) 14 students spent more than 5 hours in watching TV.