

A Bar Graph



A bar graph is a chart with rectangular bars of equal width and length proportional to the values that they represent. The bars can be horizontal or vertical with equal spacing between them. It is also called column group.

Each rectangle or bar represents only one value of the numerical data. So there are as many bars as the number of value in the numerical data. The height or length of a bar indicates on a suitable scale the corresponding value of the numerical data.



Construction of Bar Graphs:

Step 1: On a graph paper, we draw horizontal line (x-axis) and a vertical line (y-axis).

Step 2: Mark points at equal intervals along horizontal line, below these points write the names of the data items whose values are to be plotted.

Step 3: Choose the suitable scale. On the scale determine the height of the bars for the numerical values.

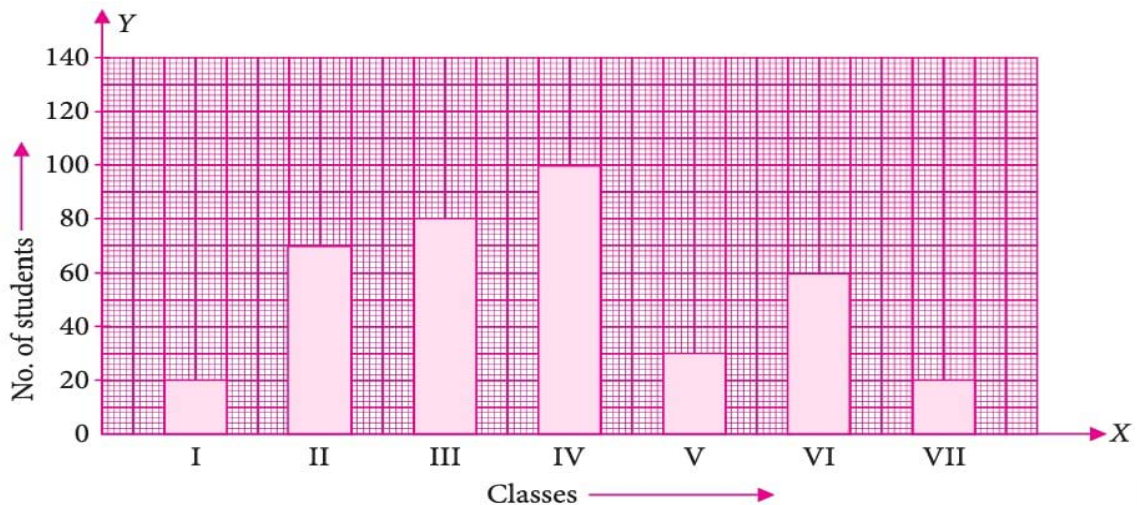
Step 4: Mark these heights parallel to the y-axis from the points in step 2.

Step 5: On the horizontal line, draw bars of equal width for the heights marked in step 4.


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 **Let us understand with an example:**

Example: The following graph shows the number of students in each class of a school. Study the graph and answer the questions that follow:



- (i) How many students are there in class I?
- (ii) How many more students are there in class IV than in class III?
- (iii) Which class has the maximum number of students?

 **Solution:** (i) Number of students in class I is 20.

(ii) Number of students in class IV more than class III = $100 - 80 = 20$

(iii) Class IV has the maximum number of students.