Bar Graphs

Understanding Notes

- A bar graph is a pictorial representation of data using bars of equal width.
- The length or height of each bar represents the frequency or value of the item.
- Bars can be drawn vertically or horizontally.
- The bars are drawn with equal spacing between them.
- The x–axis represents the categories and the y–axis represents the frequency or values.
- Bar graphs help to compare different sets of data easily and quickly.
- Important points to draw a bar graph:
  - ➢ Choose a suitable scale for the y–axis.
  - ➢ Draw bars of equal width for each category.
  - ➢ Leave equal gaps between bars.
  - ➢ Label the graph properly (title, x–axis, y–axis).

Different Types of Examples with Solutions

Example:

Drawing a Simple Bar Graph

The number of books sold by a store in four months is:

- January: 120
- March: 150
- February: 90
- April: 100

Solution:

- Draw x–axis and y–axis.
- Mark months on the x–axis and number of books on the y–axis.
- Choose a scale of 1 unit = 20 books.
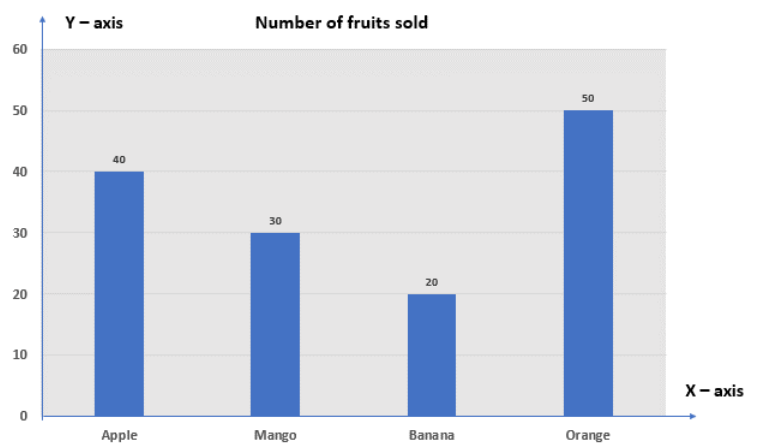- Draw bars up to heights 120, 90, 150, 100.

Example:

Interpreting a Bar Graph

A bar graph shows the number of fruits sold:

- Apple: 40

- Mango: 30

- Banana: 20

- Orange: 50

Which fruit was sold the most?

Solution:

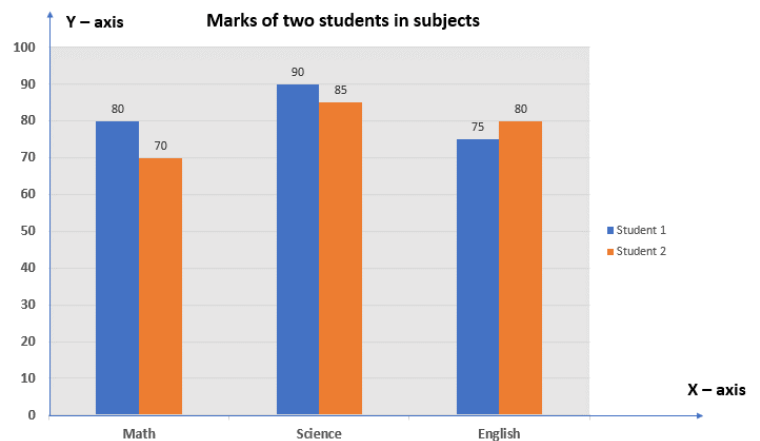- Orange was sold the most as it has the tallest bar (50).

Example:

Drawing a Double Bar Graph

Marks of two students in subjects:

- Math: 80 and 70   - Science: 90 and 85   - English: 75 and 80

Solution:

- Draw two bars for each subject.

- Use different colors or shading to show the two students.

- Label the x–axis with subjects and y–axis with marks.

Summary Points

- Bar graphs show data visually using equal–width bars.

- The height or length of each bar represents the value or frequency.

- Bars must have equal gaps and be of the same width.

- Choose an appropriate scale depending on the data.

- Bar graphs help in easy comparison between different groups.