Types of Diagrams

1) One-dimensional diagrams e.g. bar diagrams
2) Two-dimensional diagrams e.g. rectangles, squares and circles
3) Pictograms and cartograms

1) One Dimensional diagrams (Bar charts)

- Data is presented by a series of bars.
- Of two kinds.

a. Simple bar charts

- Data is presented by a series of bars.
- The height or length of each bar indicates the size of figure presented.
- The width of the bars is not considered and should be uniform.

b. Component bar chart (stacked bar chart)

- Bars are subdivided into component parts.
- It's of two kinds.

i. Component bar chart (actual)
ii. Percentage component bar chart.

c. Multiple bar charts

- The component bar figures are shown as separate bar charts adjoin each other.
- The height of each bar represents the actual value of the component figure.

d. Percentage bar diagrams

- Useful in statistical work which requires the portrayal of relative changes in data.
- Length of segment is kept 100 and segment cut in this parts represent the components (percentages) of an aggregate.

e. Deviation bars

- Used fro representing net quantities; excess or deficit. i.e net loss, net profit.
- Bars can have positive or negative values. Positive values are

f. **Broken bars**

- Used in values with great variations. E.g. very large and very small values.
- The larger bars are broken to gain space fro smaller bars.

Example

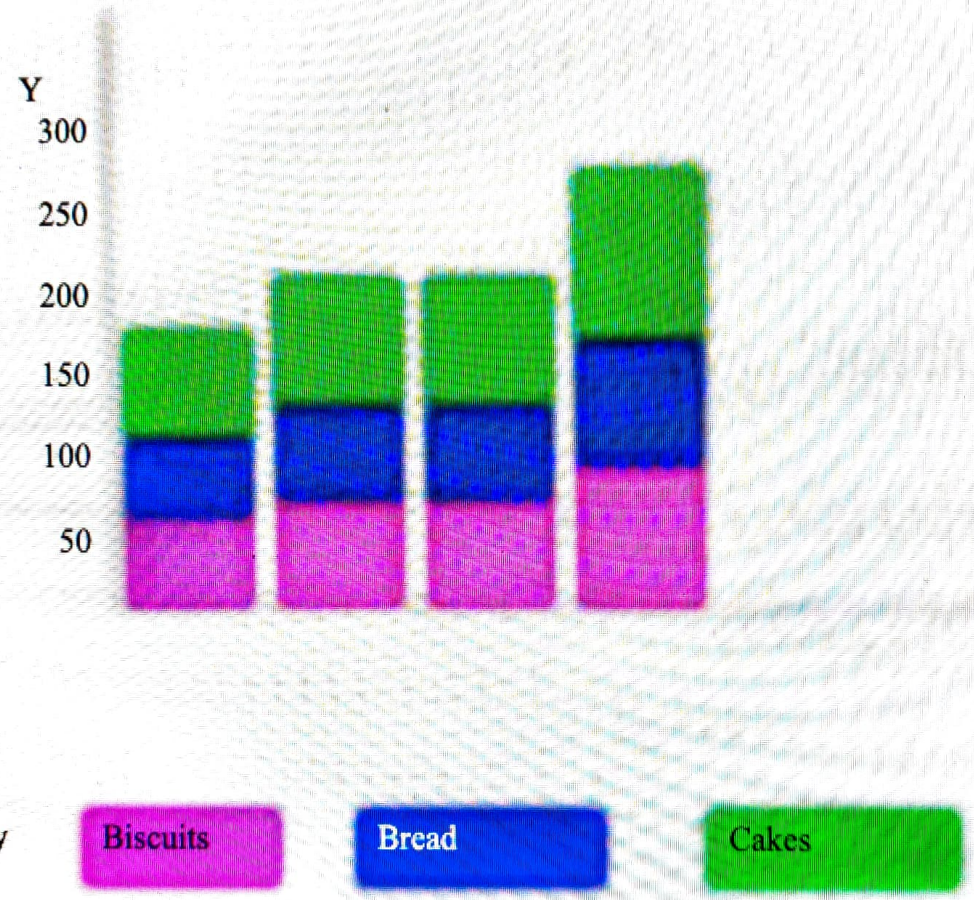
x, y, z limited are manufacturers of different products; Biscuits, bread and cakes. Their sales for period of four years were as follows:

Year	Biscuits	Bread	Cakes	Total
1995	50	80	40	170
1996	60	100	50	210
1997	70	110	30	210
1998	90	120	50	260

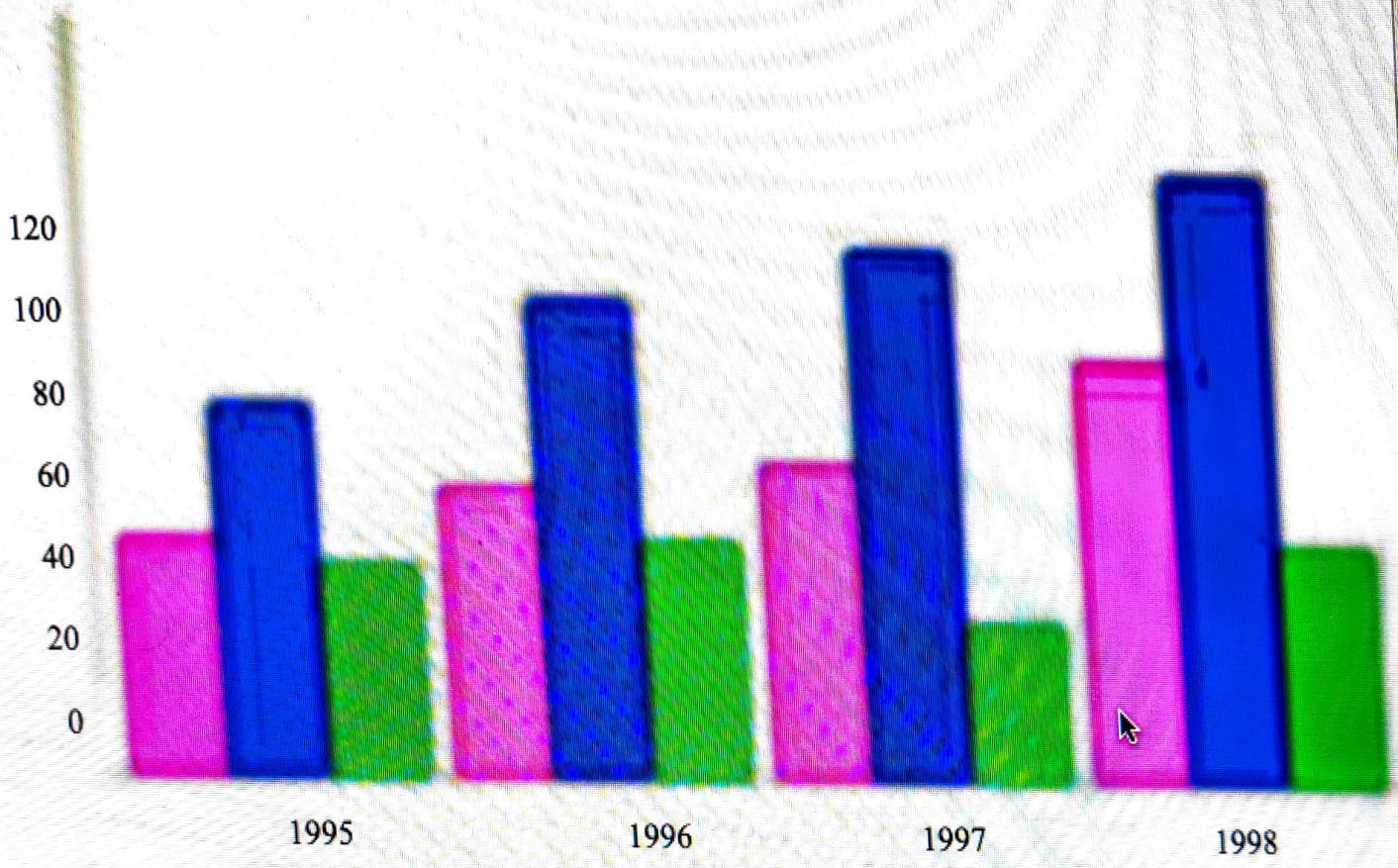
From the above information:

a) Draw a simple bar chart.

b) Draw a component bar chart.


Y
300
250
200
150
100
50
Key
Biscuits
Bread
Cakes

3. In multiple bar chart only components are shown;



2. Two dimensional Diagrams

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- The length of the width and length are considered.
- The area of the bar represents the data.
- Also known as surface or area diagrams.
- They include:

a) Rectangles

- Area of rectangle is equal to product of its length and width.
- Figures can be represented as they are shown or converted into percentages.

Example: