Motiwala (National) Homoeopathic Medical College & Hospital Nashik

# *PRESENTATION OF DATA*

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# Objectives

## LESSON OBJECTIVES

AT THE END OF THIS LESSON, YOU SHOULD BE ABLE TO:

01 define and illustrate the different methods of presenting data

02 identify the parts of a statistical table

03 determine the different types of graphs or diagrams and their uses

04 represent a set of data using the different methods of presenting data

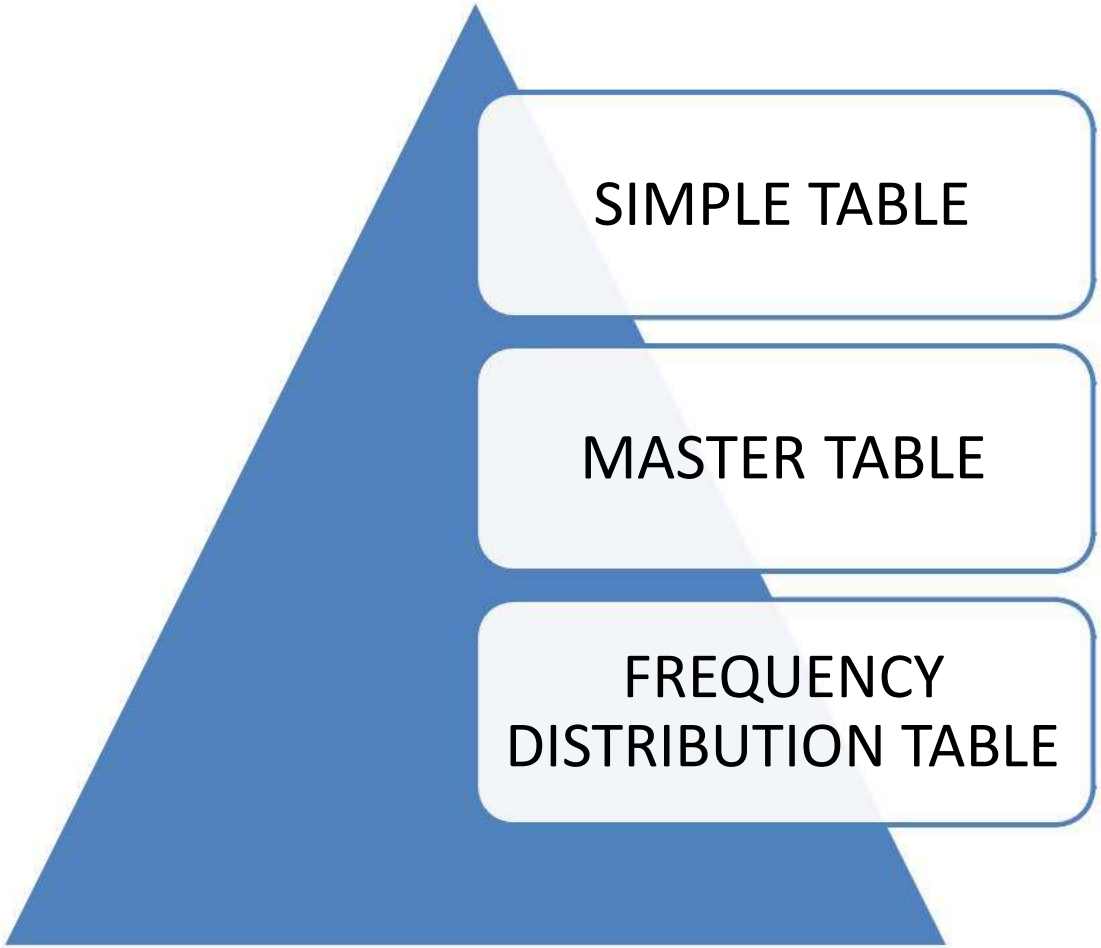
# PRESENTATION OF DATA

This refers to the organization of data into tables, graphs or charts, so that logical and statistical conclusions can be derived from the collected measurements.

# METHODS OF DATA PRESENTATION

- TABULATION
- DIAGRAMS


# TYPES OF TABLE



# Tabular Presentation

- Rules
  - Must be **numbered**
  - **Brief** and **self explanatory title** should be given
  - **Heading of column and row** must be clear,sufficent and fully defined
  - **Date** should be presented according to importance.
  - Table should **not be too large**

# Tabular presentation

- **Tabular presentation**
- Table no: Title:

| Heading of the rows(stubs) | Heading of the columns(caption) | | Total |
|---|---|---|---|
| | Subheading | Subheading | |
| Subheading | Body of the table | | |
| Subheading | | | |
| Total | | | |

- Foot note
- Source

# SIMPLE TABLE

TABLE SHOWING AVERAGE CARIES EXPERIENCE (DMFT) IN SIX DISTRICTS OF MAHARASHTRA.

| DMFT REGIONS | AVERAGE DMFT |
|---|---|
| Pune | 3.5 |
| Aurangabad | 2.1 |
| Satara | 4.7 |
| Mumbai | 3.2 |
| Latur | 4.6 |
| Nagpur | 2.6 |

# MASTER TABLE

TABLE 1 : SHOWING DECAYED ,MISSING AND FILLED TEETH AMONG FOUR DEGREE STUDENTS

| SL.NO | AGE (YRS) | SEX | EDUCATION | DECAYED | MISSING | FILLED |
|---|---|---|---|---|---|---|
| 1 | 22 | MALE | Graduate | 2 | 0 | 1 |
| 2 | 23 | FEMALE | Post graduate | 1 | 1 | 0 |
| 3 | 24 | FEMALE | Class 10 | 6 | 2 | 0 |
| 4 | 25 | MALE | Illiterate | 10 | 4 | 2 |

# FREQUENCY DISTRIBUTION TABLE

TABLE SHOWING CARIES EXPERIENCE (DMFT LEVELS) OF 15 STUDY SUBJECTS

| INTERVAL (DMFT LEVEL) | FREQUENCY | Tally |
|---|---|---|
| 1-3 | 3 | III |
| 4-6 | 2 | II |
| 7-9 | 5 | ~~IIII~~ |
| 10-12 | 3 | III |
| 13-15 | 3 | III |

CLASS INTERVAL = 2 DMFT

# Presentation of Data

## DIAGRAMMATICAL PRESENTATION

- Bar diagram (Vertical and Horizontal)
  - Simple
  - Multiple
  - Component
- Pie or Sector diagram
- Picture diagram or Pictogram
- Map diagram
- Venn diagram

## GRAPHICAL PRESENTATION

- Histogram
- Frequency polygon
- Frequency curve
- Cumulative Frequency curve
- Line chart
- Scatter or Dot diagram
- Stem & Leaf
- Box & Whisker plot

# Drawing Methods

## Qualitative

- Bar diagram
  - Simple
  - Proportional
  - Multiple
- Pie or Sector diagram
- Pictogram / Picture diagram
- Map diagram / Spot diagram
- Venn diagram

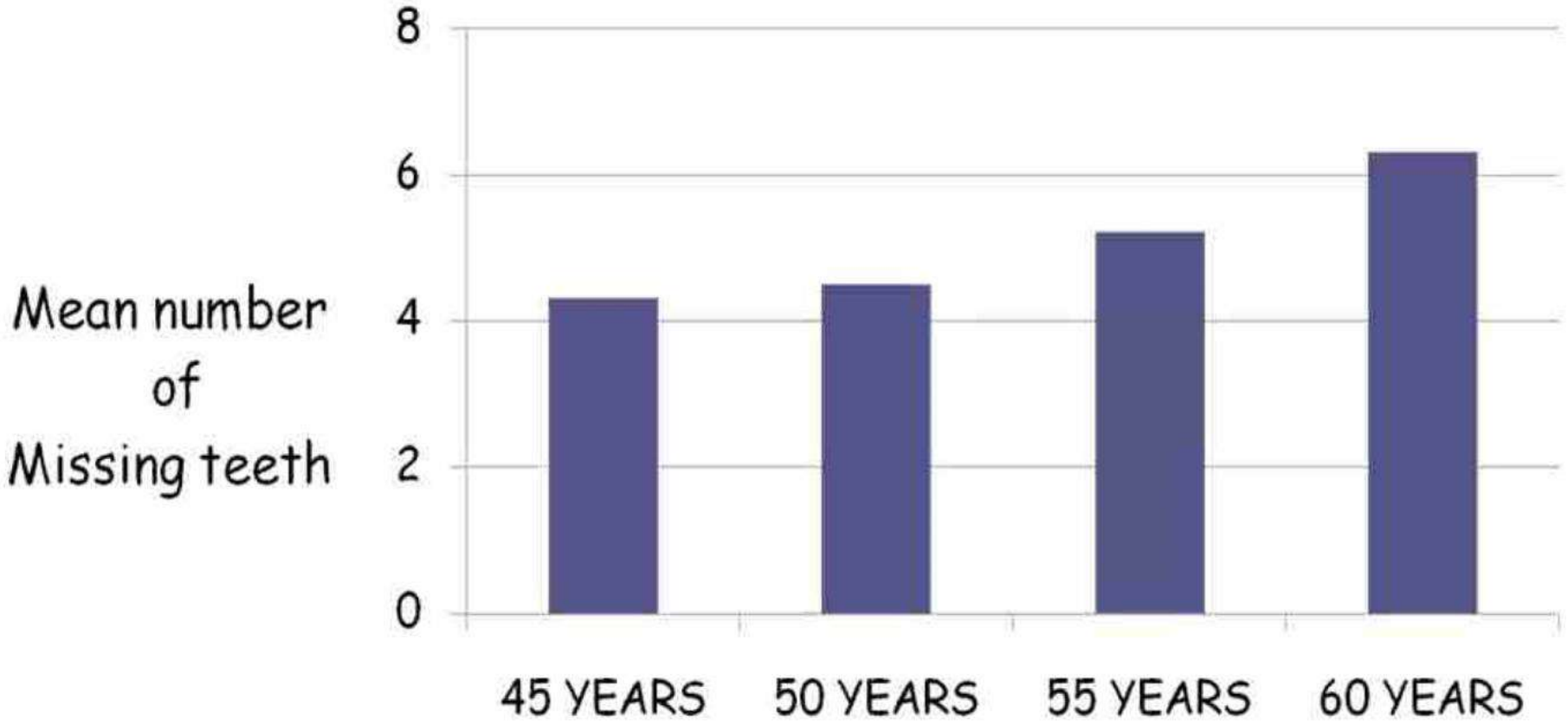
## Quantitative

- Histogram
- Frequency polygon
- Frequency curve
- Line chart / Graph
- Cumulative frequency / Ogive
- Stem and leaf method
- Scatter / Dot diagram
- Box & whisker plot

# GRAPHS AND DIAGRAMS

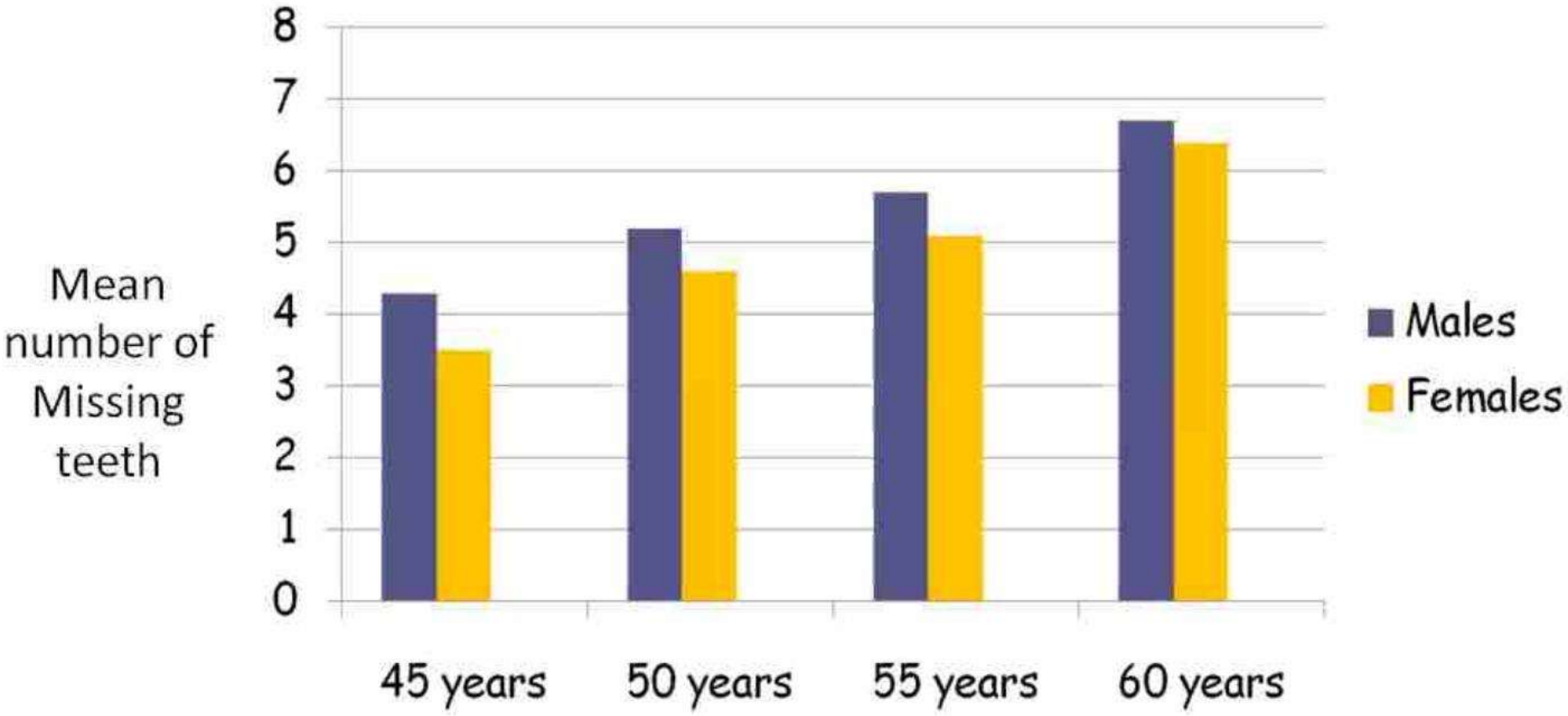
- IMPACT ON IMAGINATION
- BETTER RETAINED IN MEMORY
- EASY COMPARISONS

# SIMPLE BAR GRAPH




Graph showing the mean number of missing teeth among 45 – 60 years old study subjects.

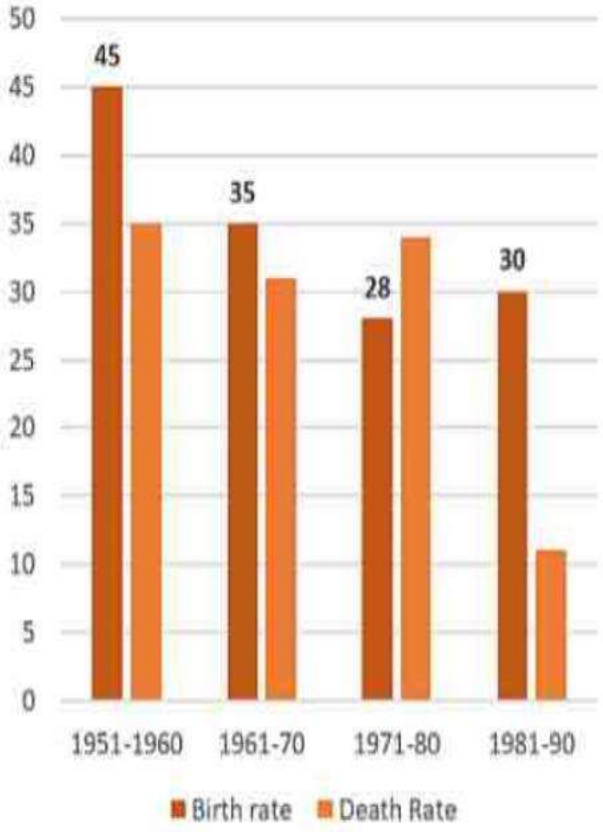
# MULTIPLE BAR Diagram / Compound BAR Diagram



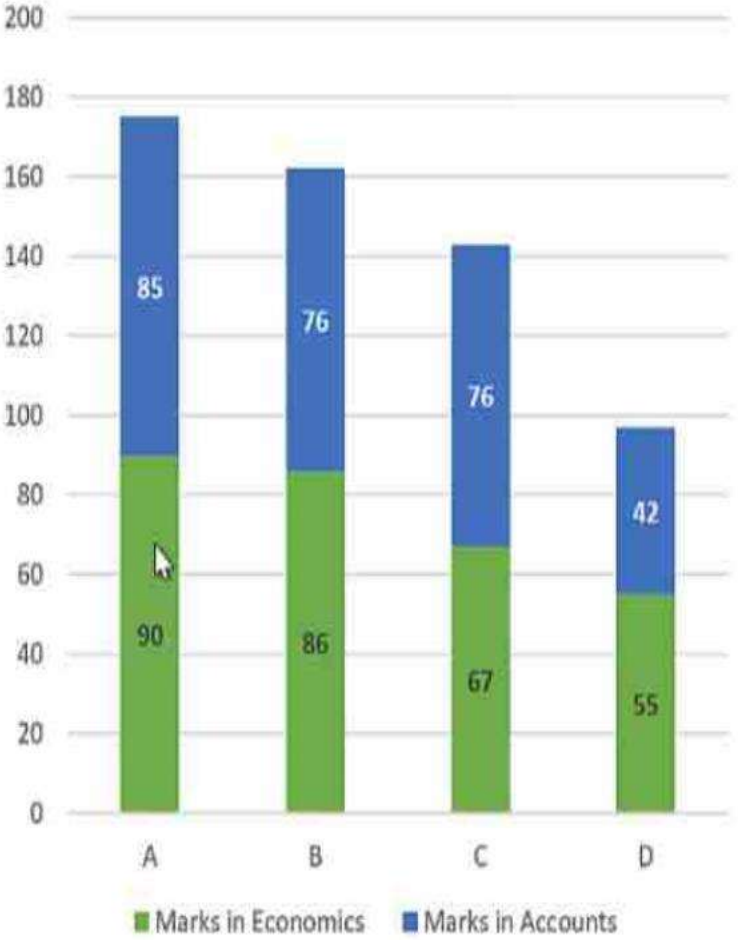

Bar graph showing the mean number of missing teeth among 45 – 60 years old study subjects.

# Diagrammatic Presentation of Data

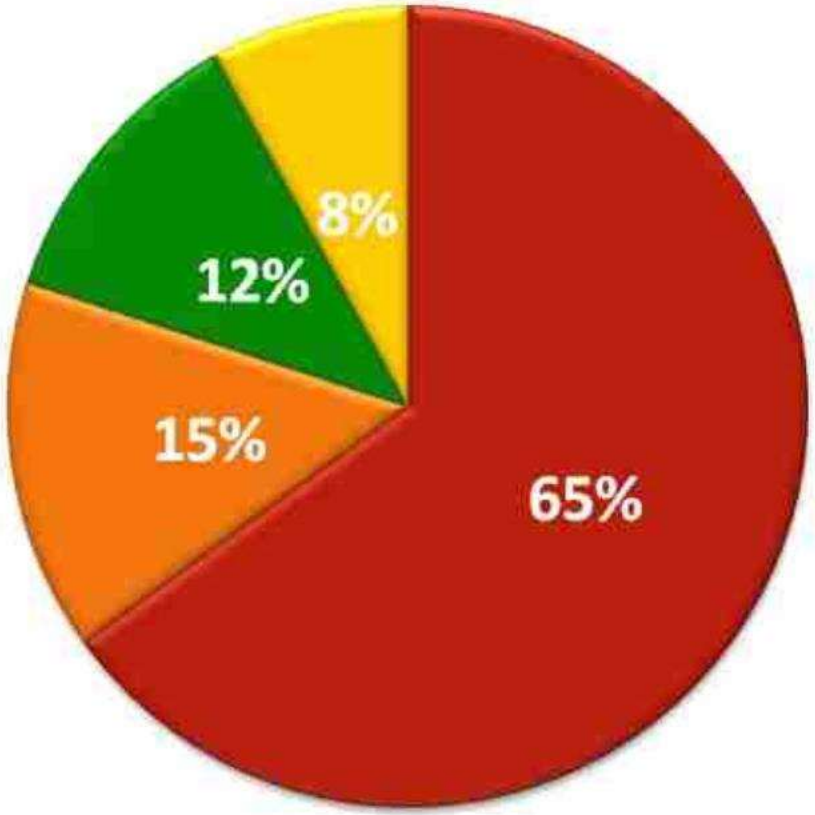
## Multiple Bar Diagram- Vertical




## Component Bar Diagram



# PIE DIAGRAM




Easy for a lay person

- Angle's Class I
- Angle's Class II
- Angle's Class III
- Angle's Class IV

Pie diagram showing the distribution of types of malocclusion among 15 year old school children.

All categories are mutually exclusive

# PICTOGRAM

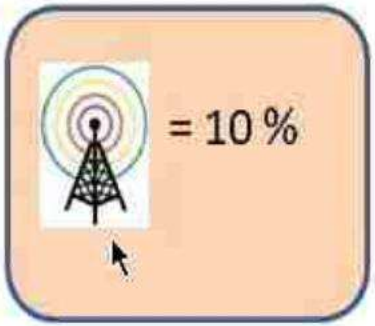
Easy for a lay person

JIO USERS

AIRTEL USERS

VODAFONE IDEA USERS

OTHERS



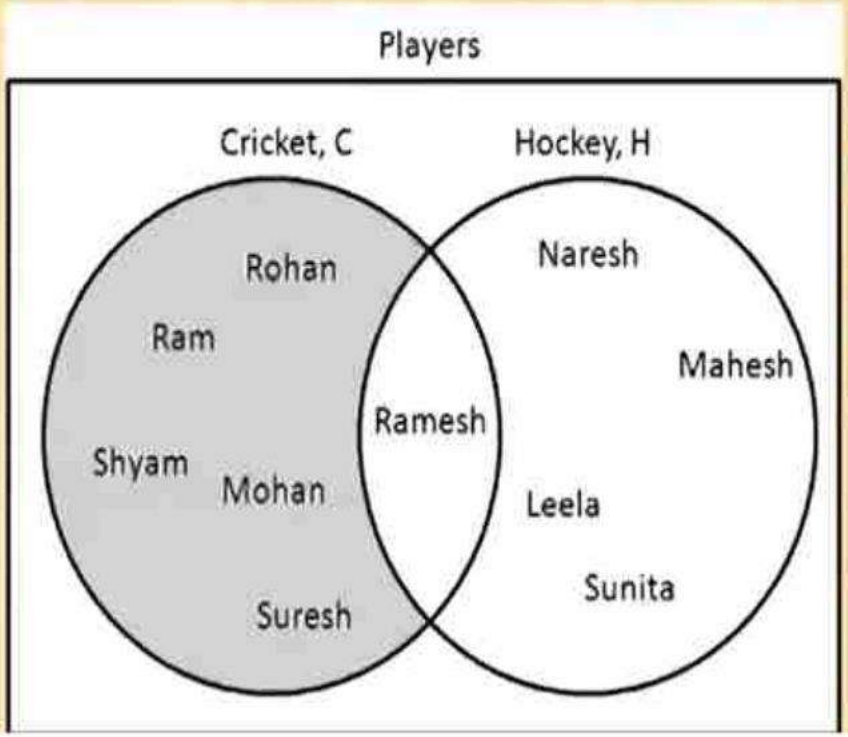

Pictogram showing the percentage( % ) of mobile network users in city.

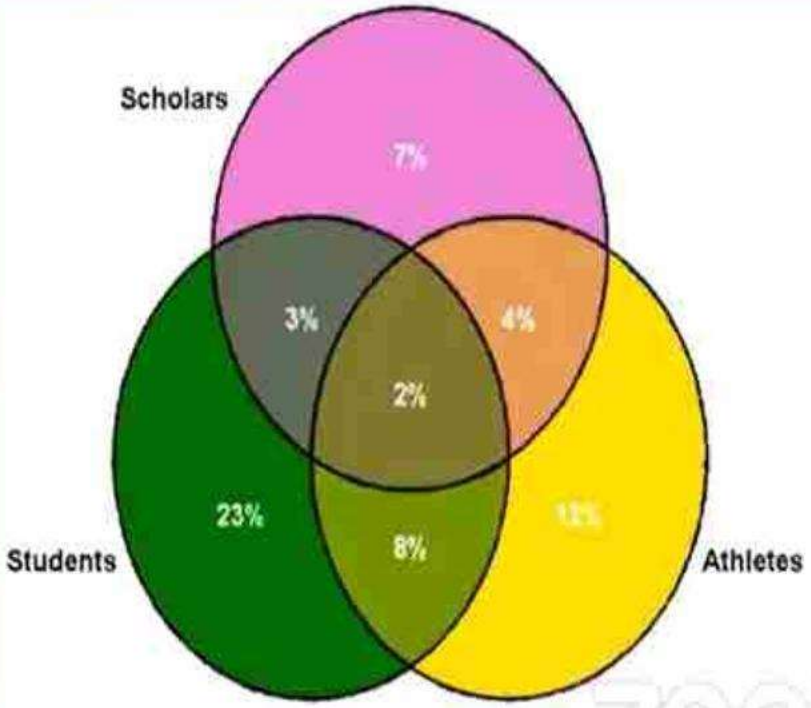
MAP
Diagram

CARTOGRAM

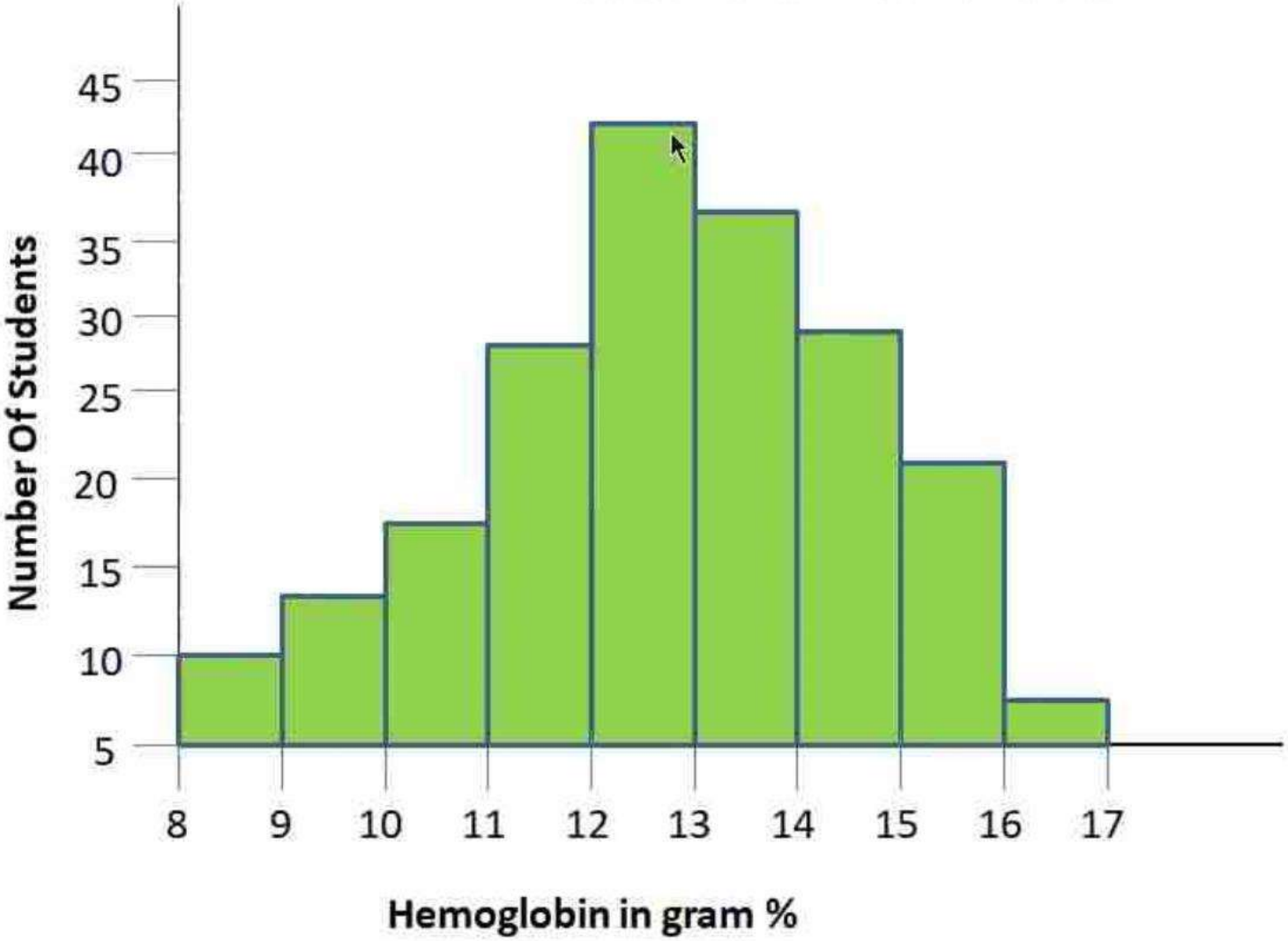
# Venn Diagram

- It is used to represent relationship between two groups.
- It shows degree of overlap and exclusivity.



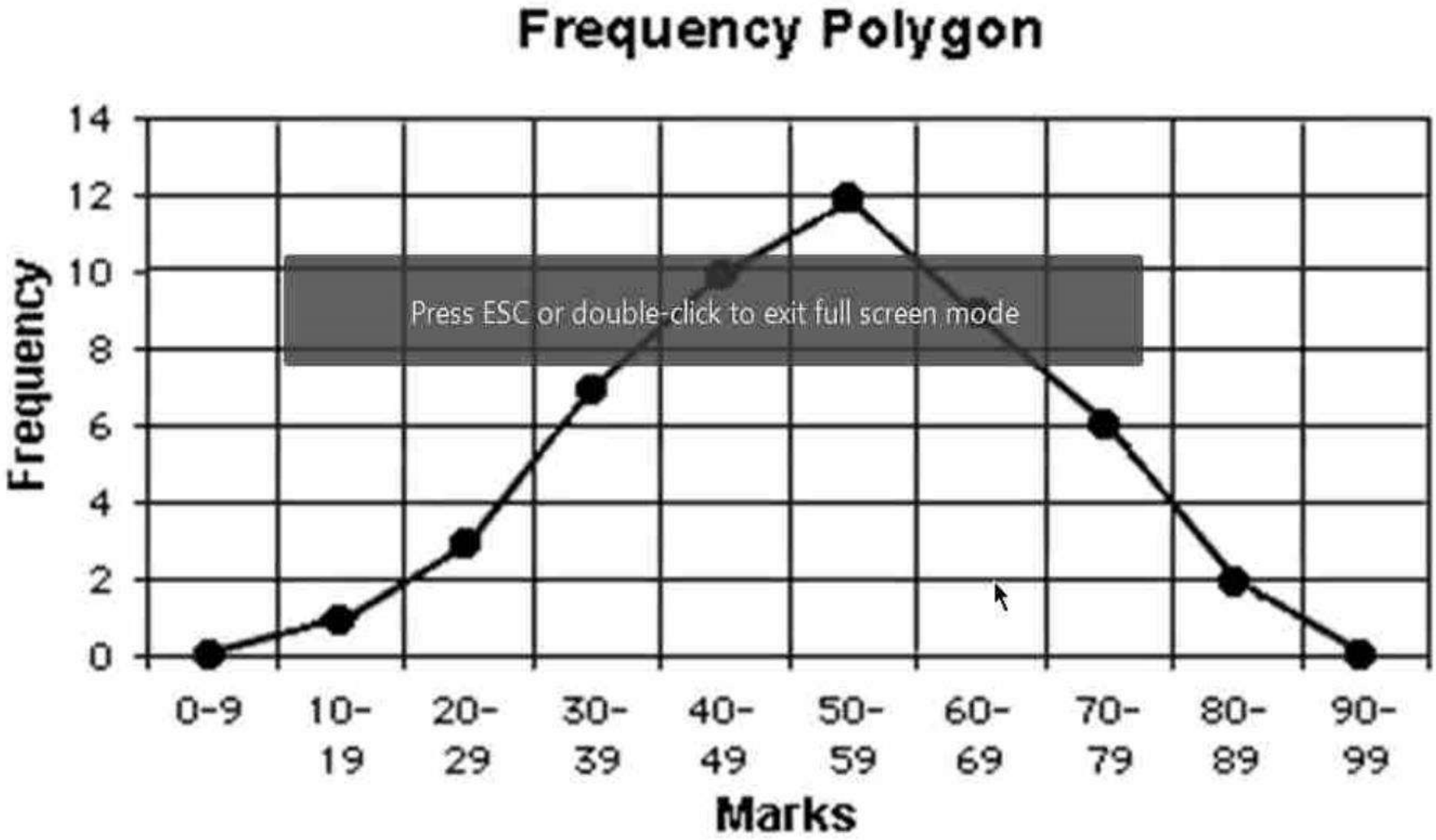



# HISTOGRAM

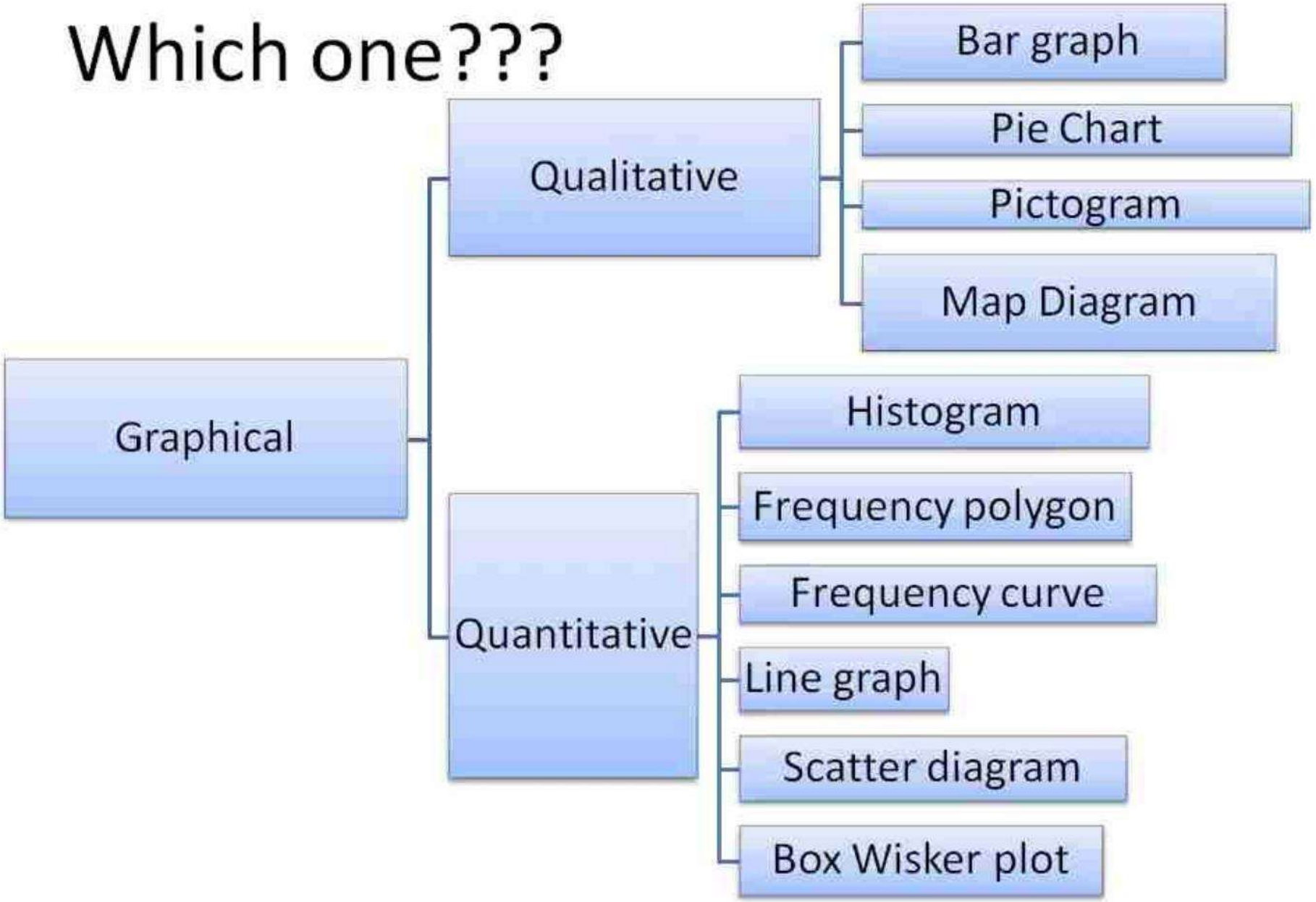



Hemoglobin levels of Students in a class.

# FREQUENCY POLYGON



# Which one???


Graphical
Qualitative
Bar graph
Pie Chart
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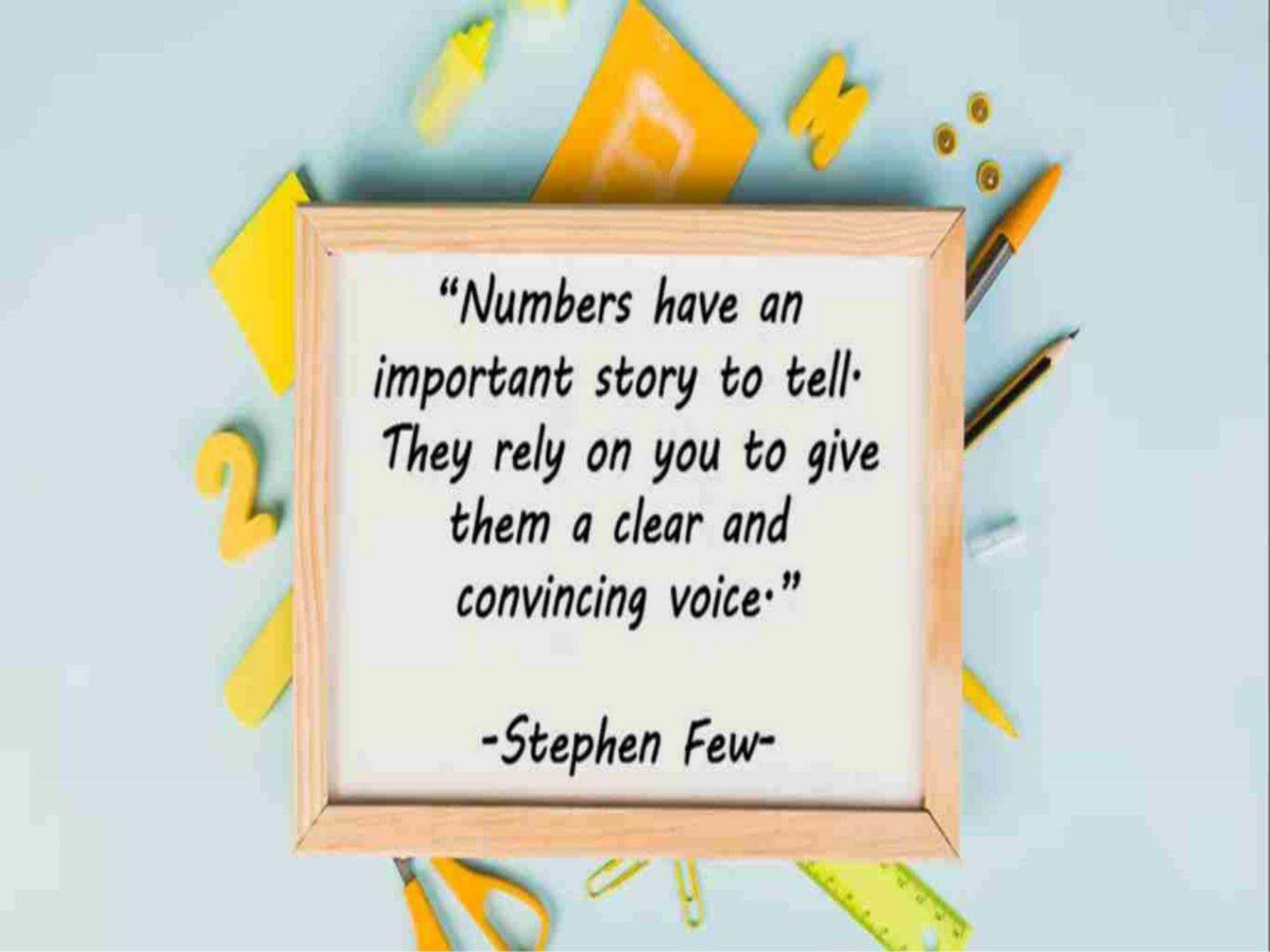
Box Wisker plot


"Numbers have an important story to tell. They rely on you to give them a clear and convincing voice."
-Stephen Few-


THANK
YOU