What is Histogram?

histogram is a chart That Plots The distribution of anumeric variable's values as a series of bars

When you should use a histogram?
Histograms are good for showing general distributions features of dataset variables

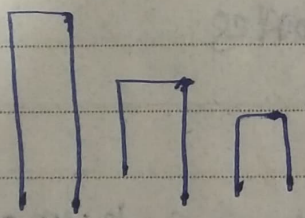
Best Practices for using a histogram
→ use a zero-Valued baseline
→ choose an appropriate number of bins
→ choose interpretable bin boundaries

Common missuess
measured variable is not continous numeric
using unequal bin sizes

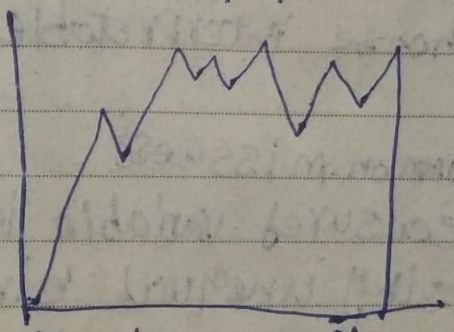
Common histogram options
→ Absolute frequency vs relative frequency
→ Displaying unknown or missing data
→ Related plots
  Bar chart
  line chart
  Density curve
  Box plot and Violin Plot

Display Type	Best Used to
Bar graph	Show the number in categories
circle Graph	Compare parts of the data to the whole
Double bar graph	Compare two or more sets of data
Box whiskers plot	Show measure & variation
Histogram	Show frequency of data divided into intervals
line graph	Show change over time
line Plot	Show frequency data on a number line

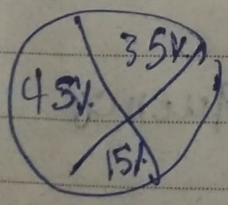
Bar graph



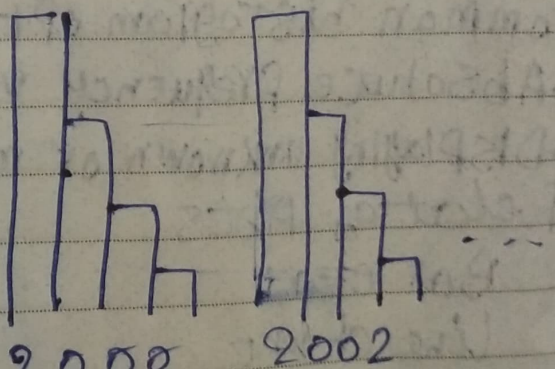
Line graph



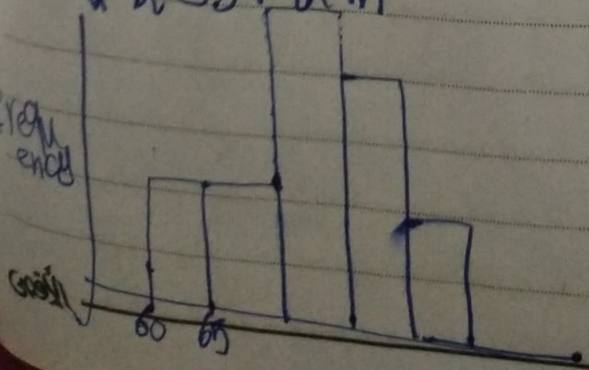
circuit graph



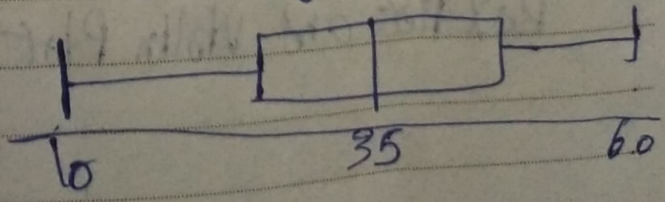
Double bar graph



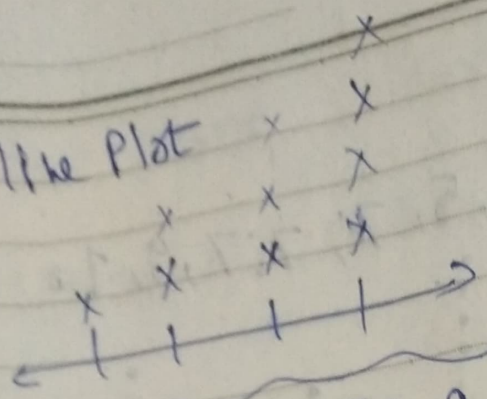
Histogram



Box and whisker



Like Plot



Histograms: are a special type of graph that shows us how often different values occur in a set of data. It's a visual representation of how many times of something happens

Stem-and-leaf-plot:
are just a graph that organise Data using the Place values of the numbers

1|0, 1|1, 1|4, 3|1, 3|3

Stem	Leaf
1	0 1 4
2	
3	1 3

Box and whisker

3, 5, 5, 6, 11, 12, 19, 14, 16, 20, 23, 25, 28, 35, 36, 37, 41, 43, 45

Five Numer Summary ← Quartile 1 — 2 — Quartile 3

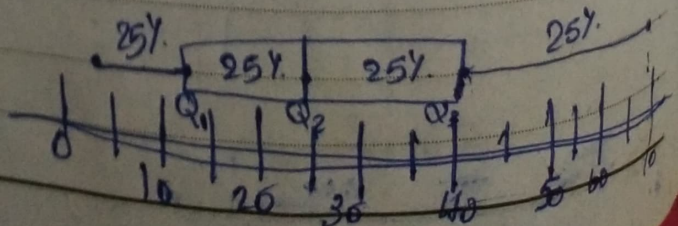
minimum value : 3

maximum value : 69

median Quartile 2: $\frac{23+25}{2} = 24$

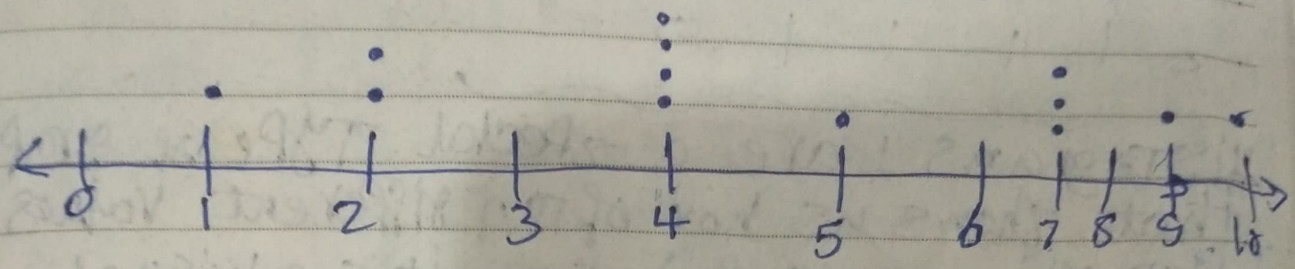
Quartile 1 : 12

Quartile 3 : 41



Dot Plots

1, 2, 2, 4, 4, 4, 4, 5, 7, 7, 7, 9, 10



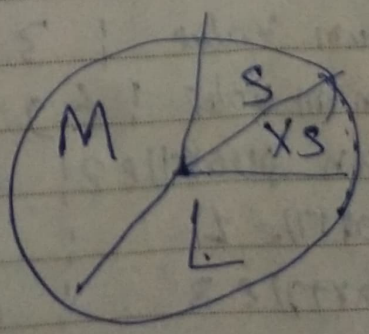
Quickly spotting patterns and trends in data
Plus they're simple and easy to understand

Pie Chart:
is a type of graph that's divided into slices sort of like a pizza each piece are expressed in %.

Size	frequency (number of Players)		
XS	5	6°*5 = 30°	1.7%*5 = 8.5%
S	10	60°	17%
M	26	156°	44.2%
L	19	114°	32.3%
	60	360°	100%

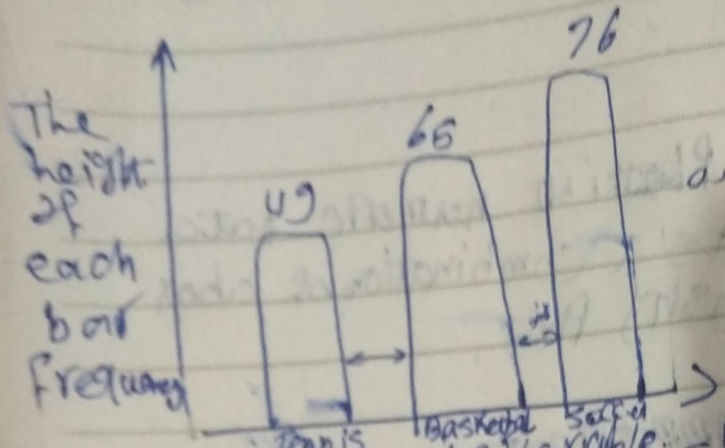
360° 360°/60 = 6° → 1 lb

100%/60 = 1.7%



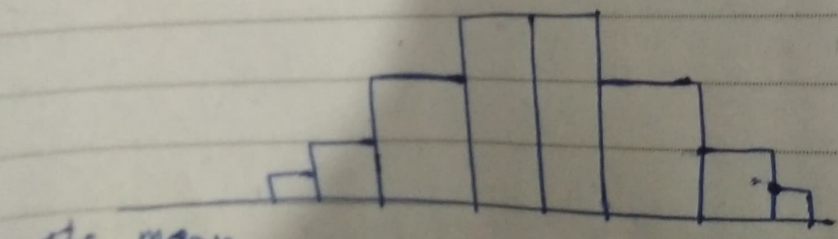
Bar chart = Bar graph

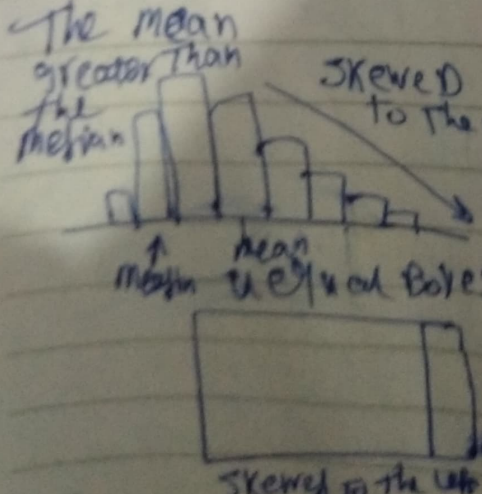
Is used to compare different types of information

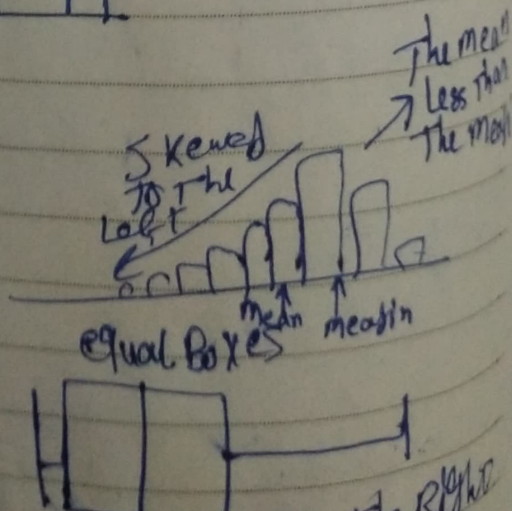


Symmetry and Skewness

Skewness a distribution is set to be symmetrical if it can be divided into two equal sizes of the same shape







HeatMap

Allows for a large volume of data to be communicated almost instantly

violin Plot

is a method of Plotting numeric data and can be understood as a combination of abox plot and a Kernal density Plot