1. **Analyzing categorical data**

* Mean
* Median
* Mode
* Range
* Mid-range
* Two way freaquency table
* Venn diagram
* Joint probability
* Marginal probability
* Conditional probability
* Independence

Link : <https://www.youtube.com/watch?v=SrEmzdOT65s&t=1s>

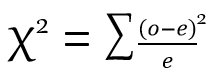
1. **Displaying and comparing quatitative data**

* Frequency table and dot plots
* Histograms
* Stem and leaf plots
* Shape of distributions
* Right skewed (Median to right side)
* Left skewed
* Symmetrical
* Cluster, gaps, peaks and outliers

1. **Chi-squared test**

* Condition for chi squre test

1. Sample must be random
2. Expected values must be >= 5
3. Variables under study must be categorical
4. Sample not more than 10 % of the population
5. Contigency table chi-square test



O = observed value

e = expected

degree of freedom = (c-1)(r-1)

* n = number of coloms
* r = number of rows
* Assume a significance level alpha , and using the alpha and degrees of freedom find critical chi square value from chi squre distribution table
* If chi- square found is less than critical chi – square value there is a significance for null hypothesis else reject the null hypothesis

Example video link: <https://www.youtube.com/watch?v=hpWdDmgsIRE&t=44s>