

## Sampling types :

- 1-with replacement ( huge data)
- 2-without replacement (sample data )
- 3-random ( balanced data )
- 4-stratified sampling ( unbalanced data )

## When I can remove the outliers from dataset ?

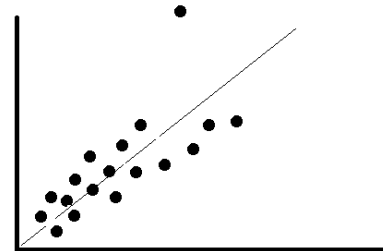
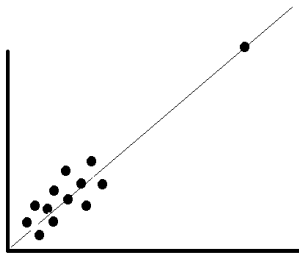
When the outlier is certainly part of the data and need a legitimate result to drop it

Ex: In this case, we cannot merely drop the outlier.

Try to run the analysis with or without the outlier and see how the result is.

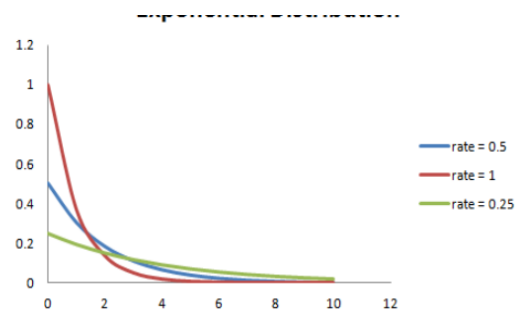
Let's see in the example below;

if we remove the outlier, the regression line will move

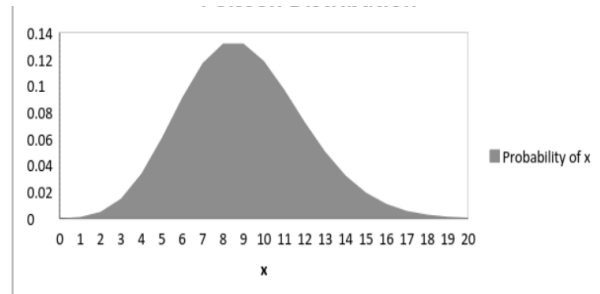


## Types of Distribution :

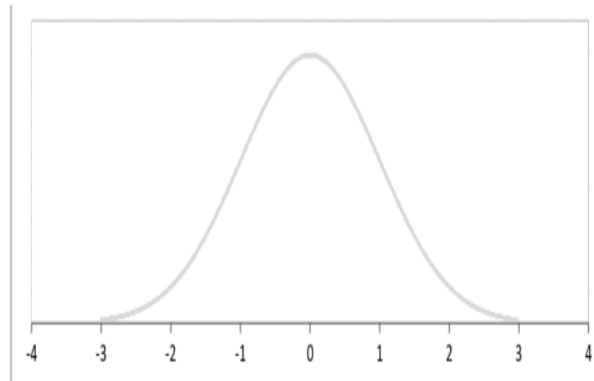
Exponential Distribution



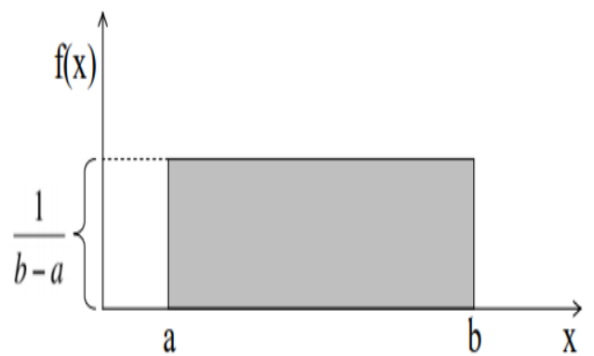
## Poisson Distribution



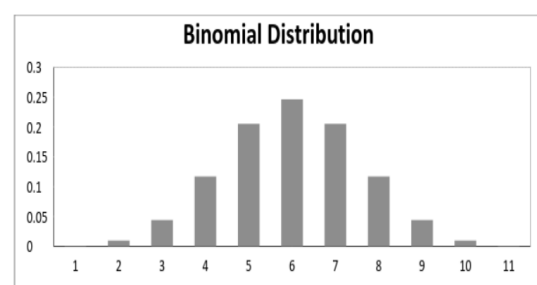
## standard normal distribution



## Uniform Distribution



## Binomial Distribution



## **Convert To Normal Distribution :**

- Log Transformation
- Square root Transformation
- Reciprocal Transformation
- Exponential Transformation
- Box-Cox Transformation

## **The Importance of Z\_Score :**

**1\_exam score**

**2\_Newborn Weights**

**3\_Blood Pressure**