# P values

A p value is the probability that random chance generated the observed data, or equal, or rarer in value.

Ie if we have the combinations HH, TH, HT, TT the probability of HH is 0.25 but the p value is 0.5 since 50% of the time we see a 25% or rarer outcome.

If we have a normal distribution and we select the p value at the mean it is 1 since 100% of the data is the same or rarer.

# Probability Distributions