Jack Stewart Formula Sheet

Currently Covering All Chapters.

Definition 1.1: Mean of n samples

Definition 1.2: Variance of samples

Definition 1.3: Standard Deviation of Samples

Definition 2.6: Union of Mutually Exclusive Events

Theorem 2.2: Calculating Permutations (Drawing employees from a company)

Theorem 2.3: Partitioning n objects into K groups with objects per group, each object used precisely once

Theorem 2.4: N Choose R

Definition 2.9: Probability of A Given B

Theorem 2.5: Probability of A and B

If Independent,

Theorem 2.6: Probability of A OR B

Definition 3.4: Expected Value of a Discrete Variable

Theorem 3.2: Expected Value of Discrete Variable

Definition 3.5: Variance of a Random Variable

Theorem 3.4: Random Variable Distributivity by a Constant

Theorem 3.6: Variance of discrete random Variable

Definition 3.7: Binomial Distribution

Theorem 3.7: Binomial Standard Deviation and Variance

Definition 3.8: Geometric Distribution

Theorem 3.8: Geometric Mean and Standard Deviation

Negative Binomial Distribution:

Hyper Geometric Distribution

Poisson Distribution

Density Function

Expected Value from Density Function

Uniform Distribution

Exponential Distribution