Distribution Function and Properties

F(y)=P()

Starts a 0:

Ends at 1:

Non decrease in between F(y1)F(y2) and assumed to be continuous except for certain points

Density Function and Properties

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Non-negative

Continuous Random Expectance:

Continuous Random Variance:

Uniform Distribution

E= V=

Multivariate Probability Distributions

Discrete Bivariate Distribution

Marginal Functions

Conditional Distribution:

Independent Random Variables

independent if

Old stuff below

Permutation

Combination

Conditional

Bayes

Independence if following:

General Addition rule

Mutually exclusive if

Expectance and variance of random numbers

Binomial Distribution

Binomial expectances and variance

Geometric Distribution with expectance and variance

Geometric shortcuts:

On or before n trial:

Before n trial:

On or after n:

After n:

Hypergeometric Distribution with expectance and variance

Negative binomial with expectance and variance

Poisson Distribution with expectance and variance

(T)Chebyshev Theorem

K=