Mean:

Variance:

Standard Deviation:

Mn rule:

Permutation:

Combination:

Conditional Probability:

Multiplicative law of probability:

If and A and B are independent are independent, then:

Additive law of probability:

If A and B are mutually exclusive:

Theorem of Total Probability:

Bayes Theorem:

Probability Mass Function: for all y

Expected: k

Variance:

Binomial Probability Function:

Expected:

Variance:

Geometric Distribution:

Expected:

Variance:

Shortcuts for Geometric Probability:

A success occurs on or beyond the nth trial:

A success occurs before the nth trial:

A success occurs on or after the nth trial:

A success occurs after the nth trail:

Hypo geometric Distribution:

(These are not fractions, but word wouldn't let me do the proper notation)

Expected:

Variance:

Negative binomial distribution:

(These are not fractions, but word wouldn't let me do the proper notation)

Expected:

Variance:

Poisson Distribution:

Expected:

Variance:

Tchebysheff’s theorem:

Distribution function of Y:

Distribution function for a continuous random variable Y:

Expected value of a continuous random variable Y:

Continuous uniform probability distribution:

Expected:

Variance:

Gamma Distribution:

Expected:

Variance:

Exponential Distribution:

Expected:

Variance:

Joint (or bivariate) probability function:

Joint (bivariate) distribution function F(y1, y2):