**Mean**

**Median**

If even:

If odd:

**Mode**

**Standard Deviation**

**Def 1.2 - Variance**

**Multinomial Coefficient**

**Axioms**

1:

2:

3:

**Collaries of Axioms**

**Combination**

**Permutation**

**Probability of Mutually Exclusive Events**

if (), then

**Conditional Probability**

**Independent if:**

**Dependent otherwise**

**Multiplicative Law of Probability**

**If A and B are dependent:**

**If A and B are independent:**

**General Addition Rule (Additive Law of Probability)**

If :

**The Theorem of Total Probability**

**Bayes Theorem**

**If P(A) and P(B) > 0:**

**If 0 < P(B) < 1:**

**Probability Mass Function**

**Expected Value of Discrete Random Variable**

**Variance**

**Standard Deviation**

**Binomial Distribution**

**Expected**

**Variance**

**Standard Deviation**

**Geometric Probability Distribution**

**Expected Value**

**Variance**

**Standard Deviation**

**On or before nth trial**

**Before nth trial**

**On or after nth trial**

**After nth trial**

**Hyper Geometric Probability Distribution**

**Expected**

**Variance**

**Standard Deviation**

**Negative Binomial Probability Distribution**

**Expected**

**Variance**

**Standard Deviation**