**Definition 1.1 Find the mean sample**

**Definition 1.2 Find the variance sample**

**Definition 1.3 Find the standard deviation of a sample measurement is the positive sqrt of variance**

**s =**

**Definition 2.6**

Axiom 1: P(A) ≥ 0

Axiom 2: P(S) = 1

Axiom 3: If

**Definition 2.9 With the event of B occurring, the conditional probability of event A is equal to**

given that P(B) > 0. [P(A|B) stands for "probability of A given B."]

**Definition 2.10 If one of the following is true, then the occurrences A and B are considered to be independent**

the occurrences are considered dependent otherwise

**Definition 2.11 Consider the sets B1, B2,..., Bk such that for a positive integer k**

Then the partition of S is then defined as the set collection {B1, B2,..., Bk }.

**Definition 3.4 Let Y have the probability function p(y) and be a discrete random variable. Then, E(Y), the anticipated value of Y, is defined 2**

**Definition 3.5 For a random variable Y, the variance is defined as the anticipated value of (Y − μ)2 if its mean is E(Y) = μ. Specifically,**

The positive square root of V(Y) is the standard deviation of Y.

**Definition 3.7 An arbitrary variable Based on n trials with a success chance of p, Y is said to have a binomial distribution if and only if**

**Definition 3.8 An arbitrary variable If and only if Y has a geometric probability distribution, then**