Definition 1.1

This finds the mean of a sample:

Definition 1.2

This finds the variance of a sample:

Definition 1.3

This finds the standard deviation of the sample:

s =

This finds the standard deviation of the population:

s =

Definition 2.2

This finds the permutations of n distinct objects taken r times:

\*\*\*Theorem 2.3

The number of ways partitioning n distinct objects into k distinct groups where each object appears only once:

Definition 2.8

This finds the number of combinations of n objects taken of r amount:

Definition 2.9

This finds the conditional probability of event A, given that event B has occurred:

Definition 2.10

Events A and B are independent if any of the following holds:

,

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Otherwise, the events are dependent.