

Stat 421
Fall 2010

Things you should know for the closed book portion of Test 1

Be able to state precisely (and use) the following:

Theorem 1.10.2: Probability of the union of n events in terms of probabilities of intersections

Theorem 2.3.1: Law of total probability

Theorem 2.3.2: Bayes' theorem

Know how to solve counting problems using permutations, combinations, multiplication principle.

Know and be able to use definitions of conditional probability, $P(A|B)$, and independence of two events.

Be able to prove two sets are equal.

Know what the probability function for a discrete random variable is and what properties it must satisfy and the same for the probability density function for a continuous random variable. Know how to work with these.