

CSC 231 WEEK 8 TEST STUDY GUIDE

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Make sure you are able to solve problems such as those on homework 5.

In addition, you need to be able to define all concepts related to probability theory that we covered in class. Refer to your class notes for details, but at the very least, you need to understand and be able to explain concepts of probability sample space, Bernoulli trial, random variable, expected value, and variance.

In addition, the following concepts are important: Bayes theorem and its applications, independent events, conditional probability.

Be able to solve counting problems that require recurrence relations, be able to solve recurrent relations using the method of characteristic functions, be able to define the notion of a generating function and be able to solve recurrence relations using generating functions.

You should know the expansion of the generating function $\frac{1}{1-x}$ and be able to obtain expansions for $\frac{1}{1-ax}$ for any constant a .