

Boston University
MA 581, Probability
Summer 2, 2013
Homework 1
Due on Tuesday, July 9, 2013

The following assignment is meant to complement the learning done in class. To get the most out of your MA 581 experience, you should attend class and complete the assigned readings and problems. One cannot be substituted for the other. Some of these problems may be more challenging than others. Please feel free to work with others, visit my office hours or email me if you need help.

Read: 1.2, 2.1-2.4, 3.1-3.3

Do the following problems:

Chapter 1: 50, 52, 53, 62, 63

Chapter 2: 17, 27, 35, 44, 60, 67, 89, 99

Chapter 3: 8, 14, 34, 36, 42, 60, 62

Extra Credit: 2.55

Note:

2.44 - You may draw instead of describe

2.55 - Recall that the lengths of any two sides of a triangle must add to more than the length of the third side.

3.36 - Make sure that you are computing only the number of ways to get each specific hand. For example, $\{a\text{ pair}\} \cap \{full\ house\} \neq \emptyset$...however, for part (h) we want the number of ways to get a pair excluding the full houses, two pair, etc.

*As always, **SHOW ALL OF YOUR WORK**. You will not get full credit for just putting the final answer.*

If you are struggling or have extra time, I invite you to do more than the problems listed here to further hone your skills and understanding.