Stat 310A/Math 230A Theory of Probability

Homework 2

Andrea Montanari Due on 10/7/2015

Solutions should be complete and concisely written. Please, use a separate sheet (or set of sheets) per each problem. Staple sheets referring to the same problem, and write your name on each sheet.

You are welcome to discuss problems with your colleagues, but should write and submit your own solution. In some cases, multiple homework options will be proposed (and indicated as 'Option 1', 'Option 2', etc.). You are welcome to work on all the problems proposed (solutions will be posted), but should submit only those corresponding to one 'Option'.

Exercises on measurable functions and Lebesgue integration

Solve Exercises [1.2.14], [1.2.20], [1.2.30], [1.2.31] and [1.2.49] in Amir Dembo's lecture notes. Solutions will also be provided for Exercises [1.2.15], [1.2.28] (these exercises will not be graded: do not turn them in).