Stat 310A/Math 230A Theory of Probability

Homework 3

Andrea Montanari Due on October 14,2015

Solutions should be complete and concisely written. Please, use a separate sheet (or set of sheets) per each problem. Staple sheets, 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' numbers refer to the version of the notes posted on the class webpage.

Exercises on convergence theorems

Solve Exercises [1.3.7], [1.3.21], [1.3.36], [1.3.37] from Amir Dembos lecture notes.