

**Stat 310A/Math 230A Theory of Probability**

## Homework 7

*Andrea Montanari*

*Due on November 18, 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 weak convergence of distributions

Solve Exercises [3.2.8], [3.2.9], [3.2.13], [3.2.26], [3.2.14] in Amir Dembo’s lecture notes.