

Homework 6

Due: October 20, 2009, beginning of the class

PLEASE READ THE INSTRUCTIONS/SUGGESTIONS WRITTEN IN THE SYLLABUS!
ALL PROBLEMS ARE FROM THE 3rd EDITION OF THE TEXTBOOK.
(GHAHRAMANI: FUNDAMENTALS OF PROBABILITY)

- Hand in the following problems:
 - *Page 173-174*: 2, 7, 12
 - *Page 182*: 3, 4, 7
 - *Page 196-197*: 1, 3, 8, 17
- Practice problems (you do not need to hand these in!):
 - *Page 173-174*: 3, 5, 6, 11, 13
 - *Page 182*: 5, 6, 8
 - *Page 196-197*: 2, 5, 8, 19, 24

You may also work on any other problem in Sections 4.4, 4.5, 5.1.

- Bonus problem:

A group of n friends go out to have dinner. When they enter the restaurant they hang their coats one by one. After dinner (and some wine) each just grabs a coat randomly without looking. Let X denote the number of people who got their own coat. Find **EX**.

DISCLAIMER: It is easy to find the solutions to (some of) these questions. (E.g. the internet, your fellow classmates ...) However, do NOT consult any of these solutions when working on this assignment or you will learn nothing from it and your chance of passing the course will be greatly diminished. If it becomes apparent to the grader that your solution is copied from existing solutions, you will be assigned a grade of zero for lack of originality.