

## Homework 2

**Due: September 22, 2009, beginning of the class**

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

- Hand in the following problems:
  - *Pages 24-25*: 17, 25
  - *Page 34*: 3, 4
  - *Page 44-45*: 1, 3, 5, 14
- Practice problems (you do not need to hand these in!):
  - *Pages 23-26*: 24, 27, 28
  - *Pages 34*: 7, 8
  - *Page 44-45*: 7, 8, 13, 15

You may also work on any other problem in Chapter 1 and Section 2.2.

- Bonus problem:

We have a  $2 \times 12$  board and we would like to cover it with twelve  $2 \times 1$  tiles. (Each tile must cover exactly two squares from the board without overlaps.) How many different ways can we do that?

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.