

MA 485-1E (Probability Theory), Dr. Chernov
Due Wed, Sep 3 (note: Monday Sep 1 is a holiday)

Assignment #1

Chapter 1. Problems 1.2.4, 1.4.16, 1.4.18, 1.4.26, 1.4.28*, 1.7.4*

Chapter 2. Problems 2.2.6, 2.2.10, 2.3.2, 2.3.20 (note: it is possible to place more than one ball in a cell), 2.4.12*, 2.4.40*, 2.R.6 (page 72; note: rotating the circular display of dresses does not change the arrangement.)

One more problem is given below:

1-A. A club with 50 members is going to form two committees, one with 8 members and the other with 7. How many ways can this be done (a) if the committees must be disjoint? (b) if they can overlap?

The starred problems are for extra credit. Each problem is graded on the base of “4 points max”.

The first additional assignment for 585 students:

1. Read Sections 1.5 and 1.6 in Chapter 1 and do Problem 1.7.10 (the remarks made in Problem 1.7.14 may be helpful). Note: this problem is very difficult; if you have trouble with it just skip it, you only need to complete 80% of the graduate problems.
2. Read Section 2.5 in Chapter 2 and do Problem 2.5.1.