

Name (please print):

Math 213, Spring 2006
HW Assignment 6

Instructions

- **Write your name on the cover sheet and staple the sheet to the assignment.** Do the problems in order, and make sure that each problem is clearly labelled.
- **Deadline:** The assignment is due in class on Friday; late homework, or homework dropped off in mailboxes, will not be accepted. (You can, of course, turn in the homework early, in my office, any time before the due date).
- **Open House:** For the remainder of the semester, the “Open House” will (usually) be Thursdays, 5 - 6 pm, in 147 Altgeld. Feel free to stop by with questions about the homework or anything else relating to this course!

Problems

All problems are from Section 5.1 in the text. The first group (through 20) involves poker probabilities. For definitions of poker terms see the text or the class handout. Express your answers in terms of binomial coefficients, not numerical values, or the $C(n, k)$ notation (the latter is not commonly used outside this book). That is, use $\binom{52}{5}$ and not $C(52, 5)$, or 2598960. Also, explain briefly where each component of your expression comes from (e.g., “pick 2 suits out of 4”)

If you are curious, you can certainly work out numerical probabilities, but numerical calculations will not be graded.

- **Poker problems:** 5.1, Problems 10–20 **except** 19 (both odds and evens)
- **Other problems (lottery, dice, etc.):** 5.1, Problems 26, 27, 30, 36