Information for Exam 4 - Math 100, Spring 2015

Where and when: April 20, usual classroom, usual time - try to get there 5 minutes early

What you need: Pencil or pencils, Student ID. *SERIOUSLY, DON'T FORGET THESE!*

You WILL be permitted to use a calculator (!) (but not any other electronics, including smartphones or smartwatches).

The exam is OPEN BOOK and OPEN NOTES.

Form: Multiple choice, 20 problems (maybe more for extra credit)

Coverage:

1. Fair Division, as covered in the lectures (April 6-10) and accompanying readings (especially the posted lecture notes, the linked chapter from the Lippmann book, and the American Scientist article);
2. Basic combinatorics (Sections 10.1-2 in text).

Breakdown:

0-3 problems on each of the following Fair Division algorithms, 15-16 total:

1. Cut/Chose
2. Lone Divider, $n = 3$
3. Lone Divider, $n > 3$
4. Selfridge-Conway
5. Last Diminisher
6. Lone Chooser/Fink Protocol
7. Method of Markers
8. Sealed Bids
9. Moving knife

(In some cases you will be asked multiple questions about a single allocation process, as with the second Fair Division HW.)

1-3 problems More conceptual questions about fair division and/or on the readings or lecture notes.

2-3 problems on counting and $n!$ from 10.1-10.2