Math 17 Winter 2015 Questionnaire

Please return this questionnaire by the beginning of class on Wednesday, January 7.

Name:

Graduating class:

Other math classes taken at Dartmouth:

1. What do you hope to get out of this course? What are you looking forward to?

2. What questions or concerns do you have about this course?

3. What else would you like me to know about you?

Please rate your level of familiarity with the following mathematical concepts and facts as:

- A. I don't know what this means.
- B. I know (or can figure out) what this means, but that's about it.
- C. I know what this means, and understand something about it.

D. I am pretty comfortable with this. If it's a concept, I can solve some problems concerning it, or prove some things about it. If it's a fact, I can probably prove it.

The expected answer in every case is A, I don't know what this means. Really. The course assumes these concepts are unfamiliar, and I will not change that unless *every* student is familiar with one of them. The reason I am asking these questions is so that, when we are working together in class, I can sometimes arrange things so the students with more background (if there are any) can help others out, and I can sometimes arrange things so the students with less background get plenty of space to think.

- $_$ $x \equiv y \mod n$
- $_$ congruence classes modulo n
- You can add congruence classes by adding representatives of those classes.
- _____ proof by induction
- _____ proof by strong induction
- _____ flowchart for an algorithm
- _____ the Euclidean algorithm
- _____ relatively prime numbers
- _____ countable set
- _____ The union of countably many countable sets is countable.
- _____ binomial coefficients
- _____ writing numbers in different bases

 $(n)_{k}$, or "*n* choose *k*"