MATH 468   Handout #1   January 13, 2014

Assignments:

1. Read the Preface.

2. Read the Note on Notation on pages x-xi.

3. Read Don Knuth's homepage.

>   **a.** How do you pronounce *Knuth* ?
>   **b.** What is Don Knuth doing in his spare time?

4. Find the definition and pronunciation of the word *potpourri.*

5. I love the first chapter, Recurrent Problems! Please read carefully and slowly the first of the three examples given there, 1.1 THE TOWER OF HANOI.

I've known this problem since childhood, and not until I read this section did I come to appreciate how utterly interesting it can be.

Along with reading this section you should be considering the associated problems at the end of the chapter. These would be

>   *Warmups* **2,3,4**
>   *Homework exercises* **10,11,12**
>   *Exam problem* **17**
>   *Research problem* **25.**

6. Here is your first written assignment. Let's call it **HW 1**:

Hand in a carefully and clearly written solution to Problem 2 plus the proof of the assertion given in the answer section that "After $X_n/2$ moves, it turns out that the entire tower will be on the middle peg, halfway home!"

This will be due at the beginning of class on Wednesday January 22.