



## **CS 312**

### **Algorithm Design**

### **Homework 2**

### **Basics of Algorithm Analysis**

**Due: February 14, 8:35 AM**

1. Do Chapter 2, Problem 1. Recall that  $\log(a*b) = \log(a) + \log(b)$ .
2. Do Chapter 2, Problem 2. For part d, it is ok to approximate with a single significant digit (showing order of magnitude, obviously).
3. Do Chapter 2, Problem 3.
4. Do Chapter 2, Problem 6. Hint for part b: Consider the times during execution of the loop when  $i \leq n/4$  and  $j \geq 3n/4$ .