

Computer Science 373 – Analysis of Algorithms
Prof. Steven Skiena
Spring 2012

Homework 1 – Asymptotics and Data Structures
Due Thursday, February 16, 2012

Each of the problems should be solved on a separate sheet of paper to facilitate grading. Limit the solution of each problem to one sheet of paper. Please don't wait until the last minute to look at the problems.

All numbered problems come from the second edition of *The Algorithm Design Manual*, by Skiena. Interested students may attempt the extra credit programming challenges problems described at the end of the relevant chapters for a small amount of additional points – small enough that you should be motivated primarily by interest and not greed.

1. Problems 1-17 and 1-19.
2. Problems 1-20 and 1-22.
3. Problems 2-7 and 2.8
4. Problem 2-19.
5. Problems 2-21 through 2.24.
6. Problem 3-2.
7. Problem 3-4.
8. Problem 3-10.
9. Problem 3-11.