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 de-
scribed 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. Exercises 4-1 and 4-2.
2. Exercises 4-5 and 4-6.
3. Exercises 4-12 to 4-15.
4. Exercises 4-16 and 4-20.
5. Exercises 4-22 and 4-24.