

# CS 3653: Discrete Mathematics      Fall 2009

Homework 5 (Version 1): Functions

Due Date: October 15 (Thursday), 2009

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## Notes:

- Read Course Information: Section 7 (Miscellaneous) and Section 9 (Academic Dishonesty or Misconduct).
- When you are giving a construction, example, etc., provide a justification with your argument. Your solutions to numerical problems must contain the derivation of your answers. In all of your presentations, strive for correctness, completeness, and clarity. When in doubt about the assumptions of problems, the interpretations of wording, etc., consult the instructor.
- You should strive to complete all problems assigned, and a subset of them will be graded.

1. Read the notes above carefully.
2. Do [Ros07] Section 2.3, exercises 2 b) and c), 12 b) and d), and 14 d) and e). Justify your answers.
3. Do [Ros07] Section 2.3, exercises 16 and 20.
4. Do [Ros07] Section 2.3, exercise 30.
5. Do [Ros07] Section 2.3, exercises 28 b) and c), 36 b), 38 b) and c), and 40 b).
6. Do [Ros07] Section 2.3, exercises 8 g) and h), and 64 e) and g).
7. Do [Ros07] Section 2.3, exercises 70 d) and e), and 72.
8. Note: More problems may be given in next version.