

Computer Science 202a  
Homework #2, due in class Wednesday, September 27, 2006

Please include how much time you have spent on (1) reading and (2) doing the problems for this assignment. This will help me calibrate the workload. Each problem is worth 10 points; partial credit will be given if the grader can easily understand enough of your answer to award it.

1. True or false? Text 2.1, problem 8, page 120. Please give a sentence of explanation for each of your answers.
2. Equal power sets implies equal sets? Text 2.1, problem 20, page 120. Please justify your answer.
3. Cartesian noncommutativity. Text 2.1, problem 30, page 120.
4. An equality for set differences. Text 2.2, problem 24, page 131.
5. Venn diagrams. Text 2.2, problem 26, page 131.
6. Must  $A = B$ ? Text 2.2, problem 30, page 131. Please justify your answers. Note: please modify part (c) to read as follows. (c)  $A \cup C = B \cup C$  and  $A \cap C = B \cap C$ ?
7. Whether functions are one-to-one. Text 2.3, problem 12, page 146. Please justify your answers.
8. Whether functions are onto. Text 2.3, problem 14, page 146. Please justify your answers.
9. Composition and one-to-one. Text 2.3, problem 30, page 147.
10. Floors and ceilings. Text 2.3, problem 70, page 149.