

22C: 019 Homework 3

Total Points= 40(4% of your grade)

Assigned 3/7/14 due 3/14/14 11:59 PM

(Read this carefully) Submit one file for this homework. We will accept only pdf files. If you prepare a handwritten solution, then it is your responsibility to scan and convert it to a legible pdf file of appropriate resolution. Taking a poor image using a cell phone and submitting it as a solution is strongly discouraged, since those are often not legible. Late assignments will not be accepted.

Solve the following problems (from the 7th Edition of your textbook). Please note that we will grade **only eight** of these problems. This subset will be chosen arbitrarily, and will be the same for every student.

Question 1. Page 244: 14 (a)

Question 2. Page 245: 40

Question 3. Page 272: 14, 24 (b)

Question 4. Page 273: 32 (d) (e)

Question 5. Page 285: 20, 34 (show the steps)

Question 6. Page 293: 28(a) (c), 30

Question 7. Page 304: 2(b)

Question 8. Page 305: **24***, **26*** (you need to practice *modular exponentiation* – see Example 12, page 254 (Be prepared to spend more time on the * questions)

Note 1. You can type the symbols $\wedge \vee \neg \rightarrow \leftrightarrow \exists \forall$ using *Insert Symbol* in Microsoft Word.

Note 2. At the end of the textbook, you can find the solutions to odd numbered exercises. These will help you in answering some of the exercises in this homework.

Note 3. Homework solutions must be your own. You can discuss a problem with another student for the sake of understanding it, but do not discuss your solution. Take the help of the TAs whenever necessary.