Math 30210 — Introduction to Operations Research

Assignment 5 (50 points total)

Due before class, Wednesday October 3, 2007

Instructions: Please present your answers neatly and legibly. Include a cover page with your name, the course number, the assignment number and the due date. The course grader reserves the right to leave ungraded any assignment that is disorganized, untidy or incoherent. You may turn this assignment in before class, or leave it in my mailbox (outside 255 Hurley Hall). It can also be emailed; if you plan to email, please check with me to see if the format you plan to use is one that I can read. No late assignments will be accepted. It is permissible (and encouraged) to discuss the assignments with your colleagues; but the writing of each assignment must be done on your own.

Reading: Sections 3.4.2 and 3.5.1.

1. (4 points) Taha 3.4B Problem 1
2. (5 points) Taha 3.4B Problem 2
3. (10 points) Taha 3.4B Problem 3 (a), b) only)
   For the above problem, you should set up the initial phase I tableau and modify the $z$-row by hand. You may then use TORA to verify that you have the correct modified tableau, and proceed to solve the rest of the problem using TORA.
4. (4 points) Taha 3.4B Problem 4
5. (6 points) Taha 3.4B Problem 5
6. (Optional!) Taha 3.4B Problem 6
7. (4 points) Taha 3.4B Problem 7
8. (5 points) Taha 3.5A Problem 1
9. (6 points) Taha 3.5A Problem 2
10. (6 points) Taha 3.5A Problem 3
11. (Optional) Taha 3.5A Problem 4