## $\begin{array}{c} {\rm MA~416} \\ {\rm Homework~\#3} \\ {\rm Due~Monday,~February~12} \end{array}$

- 1. Solve the Petro Problem by hand using the tabular form of the simplex method.
- 2. Exercise 4.3-9.
- 3. Exercise 4.5-1.
- 4. Exercise 4.5-4.
- 5. (A small multiperiod planning problem.) Formulate the Radios 'R' Us Problem and solve it using Excel. Your solution should include:
  - (a) A list and description of your variables, including units.
  - (b) A list of your resources, including units.
  - (c) A clear description of how each column or each constraint of your formulation was obtained.
  - (d) A copy of your spreadsheet, including the solution and sensitivity analysis.
  - (e) A summary report for the manager, explaining in narrative style what course of action he should take. You do not have to make a complete report on all of your sensitivity analysis, but you should make a strategic selection of significant items to comment on. Again, you do not need to provide the mathematical justification of your answers in this report. The report should be typed, single-spaced, and no more than one page long.