

MA 416
Homework #4
Due Monday, February 19

1. The Wyndor Problem (Section 3.1)
 - (a) Carry out the simplex method to obtain the optimal basic table for the Wyndor Problem.
 - (b) For each right-hand side of the original problem, determine the allowable decrease, the allowable increase, and the optimal solution and optimal objective function value as functions of the perturbation t .
 - (c) For each cost-coefficient of the original problem, determine the allowable decrease, the allowable increase, and the optimal solution and optimal objective function value as functions of the perturbation t .
 - (d) Use the shadow prices of the constraints to construct a proof that the proposed solution is indeed optimal.
2. Exercise 3.4-14. (Solve this problem using Excel.)