

MATHEMATICS AND STATISTICS 620-262 2003

ASSIGNMENT 9

DUE: FRIDAY, 17TH OF OCTOBER, 2003

Find a solution to the following goal programming problem, by solving a Lexicographic linear programming problem. Assume that Goal 1 is of more importance to the decision-maker than Goal 2. Show all working.

$$\begin{array}{ll} \text{Goal 1:} & 2x_1 + x_2 \geq 14 \\ \text{Goal 2:} & x_1 - x_2 \geq 6 \\ \text{s.t.} & x_1 + x_2 \leq 10 \\ & x_1, x_2 \geq 0 \end{array}$$