

Homework for Lecture 13 (Due Nov. 8, 2023) of Linear Optimization

(Math 354, section 3), Spring 2023 (Dr. Z.)

In addition to problems 1,2,3,4,5,6,7 of section 3.2 (pp. 182-183) do the following

Extra problem

Use the method of pp. 166-172, illustrated by Example 1 (pp. 170-172) to predict **without** using the simplex method, what the final tableau would be if the initial tableau is

$$\begin{array}{c|cccc|c} \text{BASIC} & x & y & u & v & z & \text{RHS} \\ \hline u & 2 & 1 & 1 & 0 & 0 & 6 \\ v & 1 & 2 & 0 & 1 & 0 & 6 \\ \hline & -1 & -1 & 0 & 0 & 1 & 0 \end{array}$$

and the basic variables of the final tableau (in that order, i.e. from top to bottom) are x and y .