

Attendance Quiz for Lecture 11

NAME: (print!) _____

E-MAIL ADDRESS: (print!) _____

1. By using the initial tableau for the following problem

Minimize $x_1 + x_2$ subject to the constraints

$$2x_1 + x_2 \geq 2 \quad , \quad x_1 + 2x_2 \geq 2 \quad ,$$

$$x_1 \geq 0 \quad , \quad x_2 \geq 0 \quad ,$$

that we got in attendance quiz 10, find the optimal solution using the big- M method.

$$\begin{array}{c|cccccccc|c} & x_1 & x_2 & x_3 & x_4 & y_1 & y_2 & z & \\ \hline - & - & - & - & - & - & - & - & - \\ y_1 & 2 & 1 & -1 & 0 & 1 & 0 & 0 & 2 \\ y_2 & 1 & 2 & 0 & -1 & 0 & 1 & 0 & 2 \\ \hline - & - & - & - & - & - & - & - & - \\ & 1 - 3M & 1 - 3M & M & M & 0 & 0 & 1 & -4M \end{array} .$$