

Math 354

Participation #4 Name: _____ netID: _____ Section: _____

Consider the linear programming problem: Maximize $z = 4x_1 + 2x_2 + 7x_3$ subject to

$$2x_1 - x_2 + 4x_3 \leq 18$$

$$4x_1 + 2x_2 + 5x_3 \leq 10$$

$$x_1 \geq 0, x_2 \geq 0, x_3 \geq 0.$$

1. Use the simplex method to find the optimal solution.