

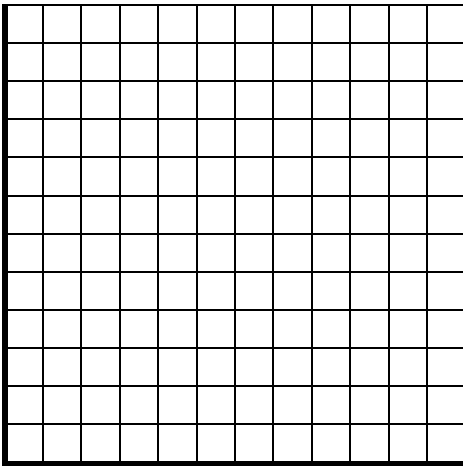
Math 460 Session 10

Recall the maximization problem:

Maximize $5x_1 + 7x_2 + 0s_1 + 0s_2 + 0s_3$
subject to $x_1, x_2, s_1, s_2, s_3 \geq 0$ and

- 1) $1x_1 + 0x_2 + 1s_1 + 0s_2 + 0s_3 = 6$
- 2) $2x_1 + 3x_2 + 0s_1 + 1s_2 + 0s_3 = 19$
- 3) $1x_1 + 1x_2 + 0s_1 + 0s_2 + 1s_3 = 8$

Graph the feasible set and label the vertices of the feasible set:



Construct the initial simplex tableau: