Math 460 Session 10

Recall our mathematical model for the Par, Inc. problem:

Maximize $10x_1 + 9x_2 + 0s_1 + 0s_2 + 0s_3 + 0s_4$ subject to $x_1, x_2, s_1, s_2, s_3, s_4 \geq 0$ and

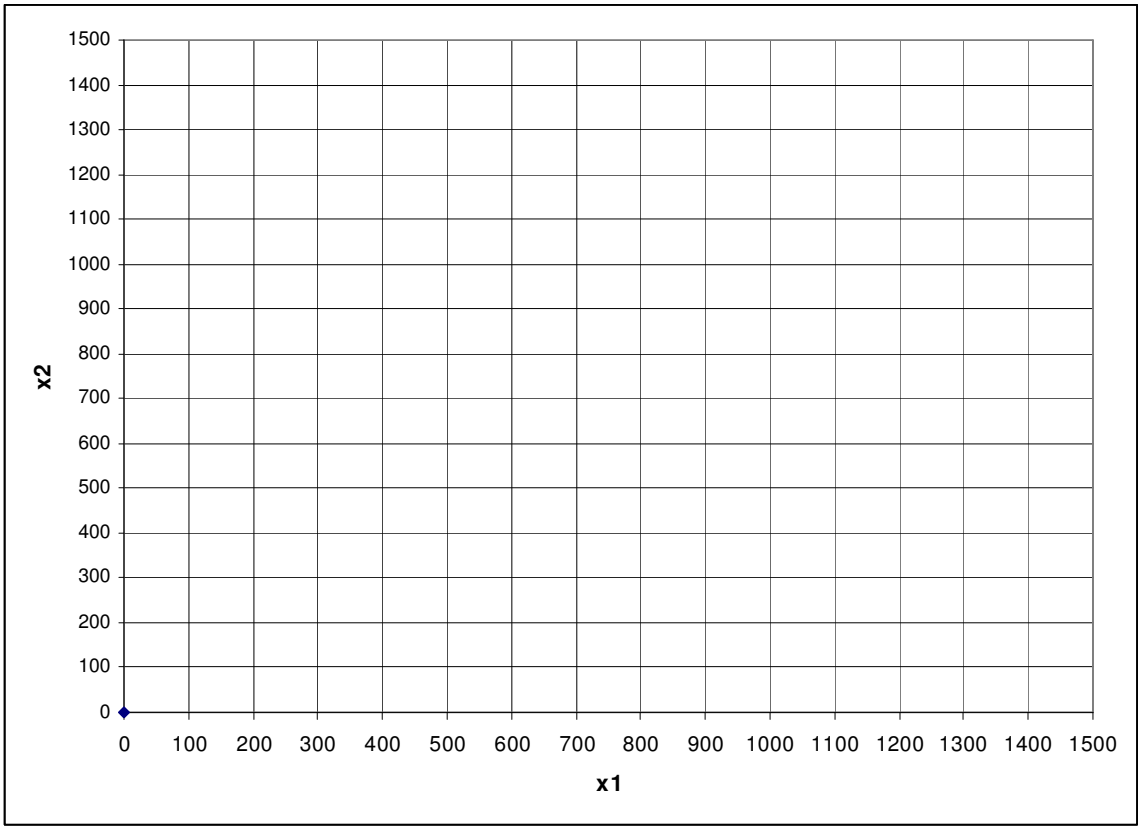
1) $\frac{7}{10}x_1 + 1x_2 + 1s_1 + 0s_2 + 0s_3 + 0s_4 = 630$

2) $\frac{1}{2}x_1 + \frac{5}{6}x_2 + 0s_1 + 1s_2 + 0s_3 + 0s_4 = 600$

3) $1x_1 + \frac{2}{3}x_2 + 0s_1 + 0s_2 + 1s_3 + 0s_4 = 708$

4) $\frac{1}{10}x_1 + \frac{1}{4}x_2 + 0s_1 + 0s_2 + 0s_3 + 1s_4 = 135$

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



Construct the initial simplex tableau: