Math 460 Session 2

A mathematical model for the Par, Inc. problem:

Maximize $10x_1 + 9x_2$ subject to $x_1 \geq 0$, $x_2 \geq 0$ and

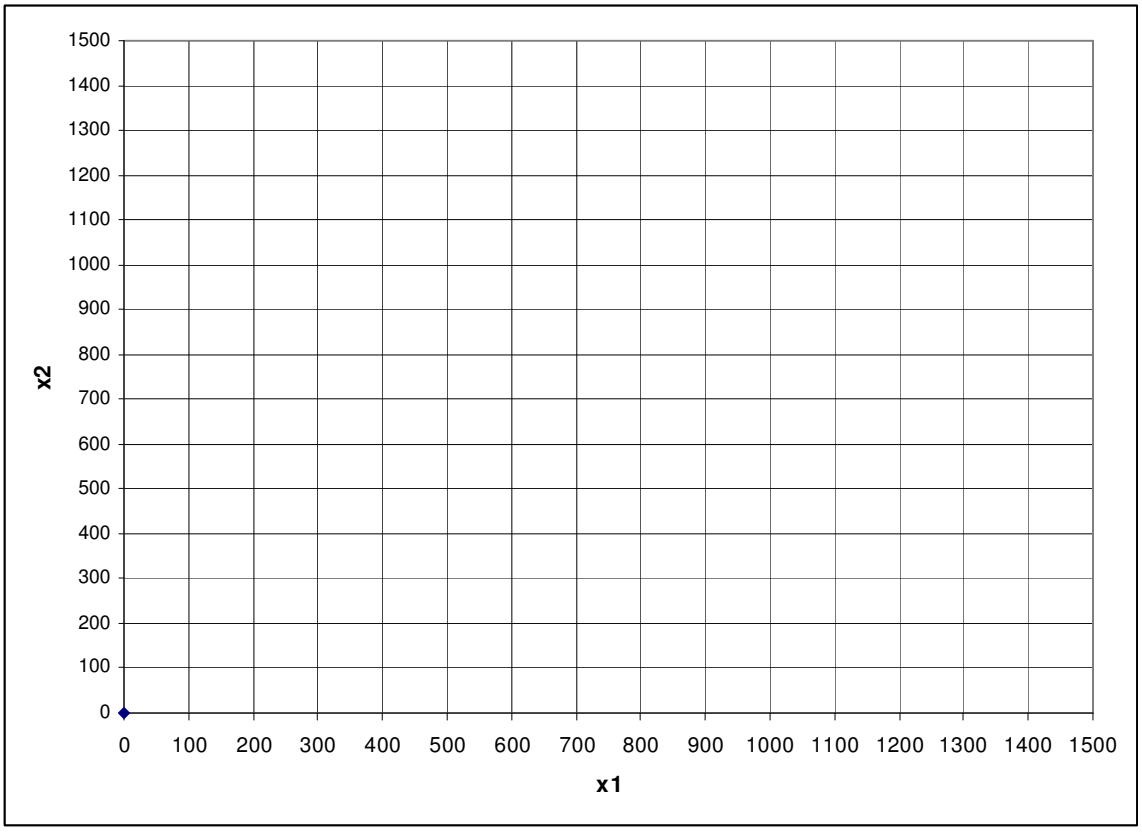
1) $\frac{7}{10}x_1 + 1x_2 \leq 630$

2) $\frac{1}{2}x_1 + \frac{5}{6}x_2 \leq 600$

3) $1x_1 + \frac{2}{3}x_2 \leq 708$

4) $\frac{1}{10}x_1 + \frac{1}{4}x_2 \leq 135$

Graph the feasible set:



Graph some profit lines:

$10x_1 + 9x_2 = 3600$

$10x_1 + 9x_2 = 4500$

$10x_1 + 9x_2 = 6300$