

Math 1010 April 7, 2017 Homework 27
Text problems: 7.5 # 1, 3, 9, 21, 25, 31

1) Graph the linear system:
$$\begin{cases} x \geq 0 \\ y \geq 1 \\ x + y \leq 5 \\ y \leq x + 1 \end{cases}$$

2) Find the optimal values (max and min) of $5x + 2y$ which occur at the vertices of the area graphed above.

3) Graph the linear system:

$$\begin{cases} x \geq 0 \\ y \leq 50 \\ x + y \leq 100 \\ y \geq x - 80 \end{cases}$$

4) Find the optimal values (max and min) of $7x + 8y$ which occur at the vertices of the area graphed above.