

Quiz 9

Minimize the objective function $f = 5x + 2y$, subject to the constraints

$$\begin{cases} x \geq 0, \\ y \geq 0, \\ 5x + y \geq 0, \\ x + y \geq 6. \end{cases}$$

1. First draw an accurate sketch of the feasible region, where the constraints are all satisfied. (8 pts.)

2. Find the vertices of the feasible region. (6 pts.)

3. Minimize the objective function subject to the given constraints. (6 pts.)