ISYE 3133 Project 1

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Decision Variables:

$d_i =$ pounds of drug i produced, $i = 1, 2$

$p_i =$ iterations of process i run, $i = 1, 2$

Objective Function:

$max\{7d_1 + 5d_2\}$

Constraints:

$d_1 <= 0.8(3p_1 + 3p_2)$

$d_2 <= 0.6(3p_1 + p_2)$

$2p_1 + 3p_2 <= 90$

$3p_1 + 2p_2 <= 75$

$d_1, d_2 >= 0$

$p_1, p_2 \in \mathbb{Z}^{0+} = \{0, 1, 2, 3, \ldots\}$