Quantitative Management Modeling

Assignment 1

Def:

X1: the number of unites produced from product collegiate

X2: the number of unites produced from product Mini

Z: is the object function to maximize the profit

Problem formulation:

Z = 32 X1 + 24 X2

s.t

$$3\ X1 + 2\ X2 \leq 5000 \qquad (1)$$

$$45\ X1 + 40\ X2 \leq 2400 \qquad (2)$$

$$X1 \leq 1000 \qquad (3)$$

$$X2 \leq 1200 \qquad (4)$$

$$X1,\ X2 \geq 0 \qquad (5)$$