

Assignment - 1

19K41A05B1

Manual calculation / Mathematical modellings

→ objective function :

$$\text{Maximize } 50x + 120y$$

→ Subjected to :-

$$\text{Inequality constraint : } 10x + 30y \leq 1200$$

$$\text{Inequality constraint : } 7000x + 2000y \leq 700000$$

$$\text{Inequality constraint : } x + y \leq 110$$

$$\text{Boundaries : } x, y \geq 0$$

→ Objective function matrix : $[-50, -120]$

Ineq. constraints coeff. matrix : $[10, 30], [7000, 2000], [1, 1]$

Ineq. constraints constants : $[1200, 700000, 110]$

