

$$1750 - x_1 \leq 1200$$

$$-x_1 \leq 1200 - 1750$$

$$-x_1 \leq -550$$

$$x_1 \geq 550$$

06

$$c. Ax \leq B$$

$$A = \begin{bmatrix} 1 & 1 \\ 0 & -1 \\ -1 & 0 \end{bmatrix}$$

$$B = \begin{bmatrix} 1000 \\ -400 \\ -550 \end{bmatrix}$$

$$1500 - x_2 \geq 0$$

$$1750 - x_1 \geq 0$$

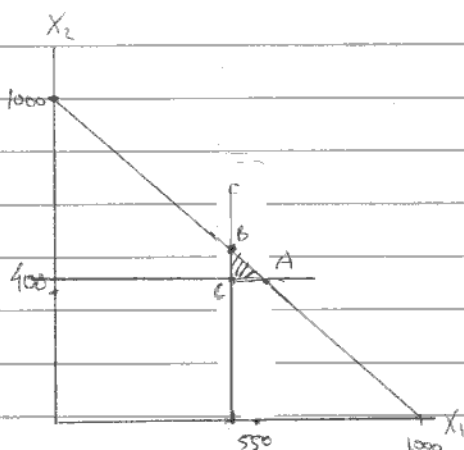
$$Ax \leq B$$

$$\begin{bmatrix} 1 & 1 \\ 0 & -1 \\ -1 & 0 \end{bmatrix} \begin{bmatrix} x_1 \\ x_2 \end{bmatrix} \leq \begin{bmatrix} 1000 \\ -400 \\ -550 \end{bmatrix}$$

$$d. x_1 + x_2 \leq 1000$$

$$\text{misal } x_1 = 0, x_2 \leq 1000$$

$$\text{misal } x_2 = 0, x_1 \leq 1000$$



misal titik A

$$x_1 + x_2 = 1000$$

$$x_2 = 400$$

$$\Rightarrow x_1 + 400 = 1000$$

$$x_1 = 1000 - 400$$

$$x_1 = 600$$

$$J(x) = -(200x_1 + 200x_2) + 2450.000$$

$$= -(200(600) + 200(400)) + 2450.000$$

misal titik B

$$x_1 + x_2 = 1000$$

$$x_1 = 550$$

$$\Rightarrow 550 + x_2 = 1000$$

$$x_2 = 1000 - 550$$

$$x_2 = 450$$

$$J(x) = -(200(550) + 200(450)) + 2450.000$$

$$= -200.000 + 2450.000$$

$$= 2250.000$$

misal titik C

$$x_1 = 550$$

$$x_2 = 400$$

$$J(x) = -(200(550) + 200(400)) + 2450.000$$

$$= -190.000 + 2450.000$$

$$= 2260.000$$

Jadi, nilai optimum pada pembangkit adalah 2250.000