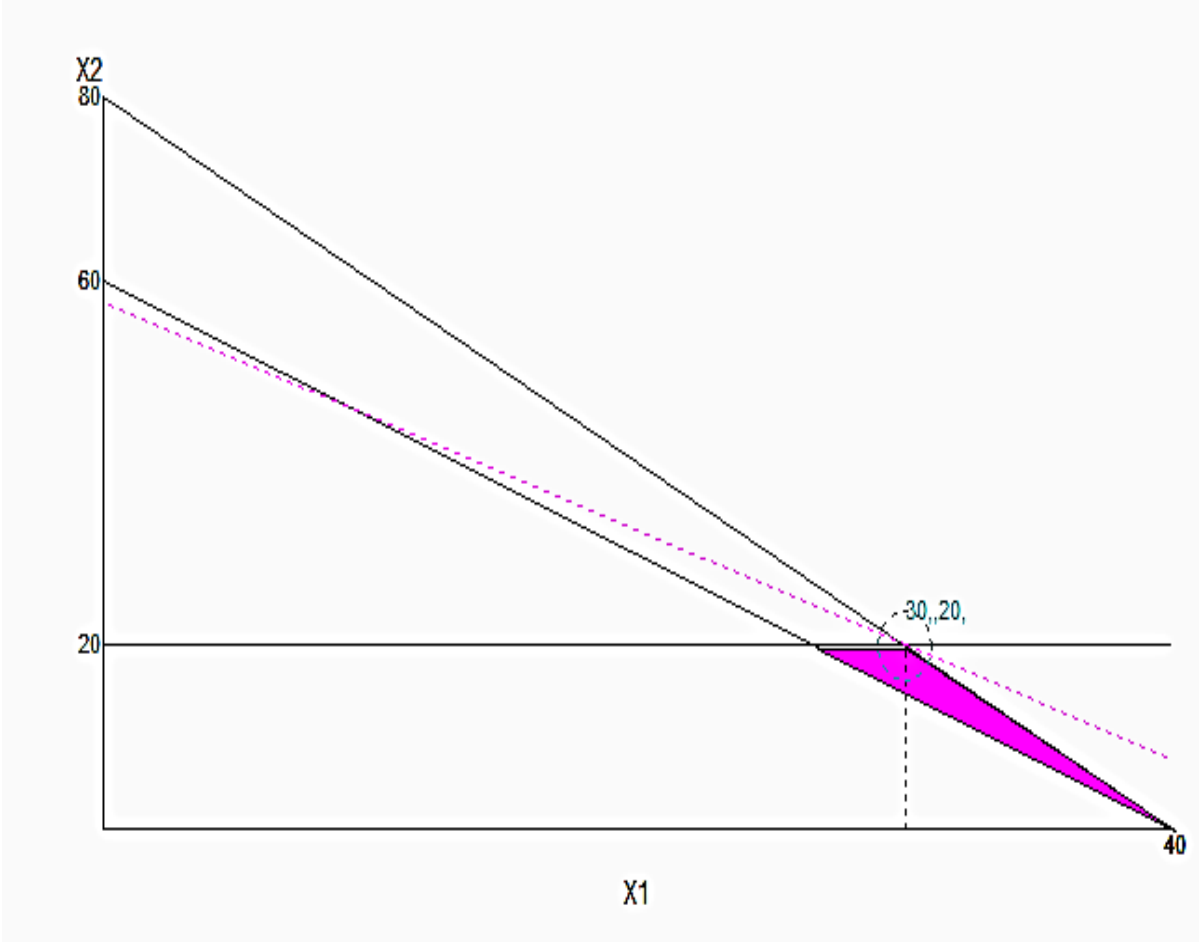
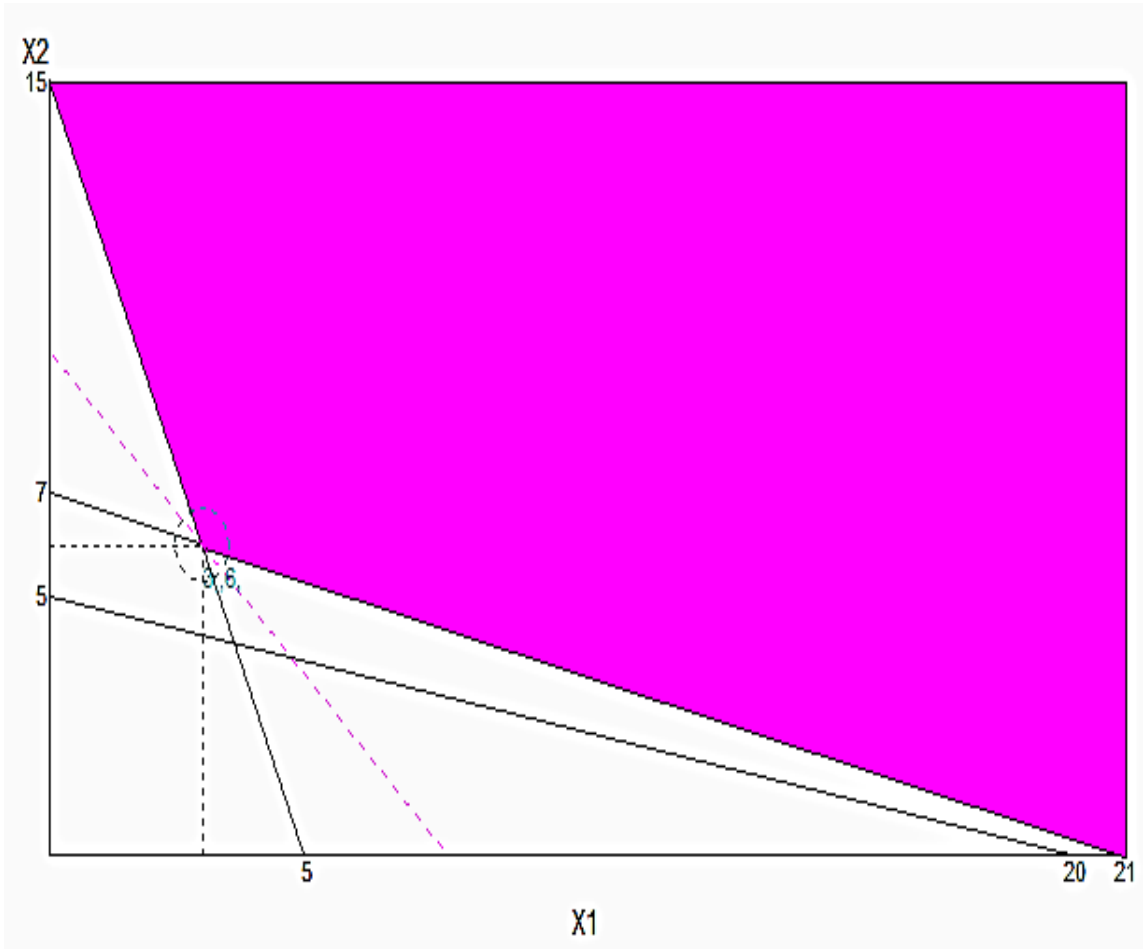


$$\begin{aligned} \text{Max: } Z &= 5X_1 + 4X_2 \\ \text{S / c } &\begin{cases} 3X_1 + 2X_2 \geq 120 \\ 4X_1 + 2X_2 \leq 160 \\ 3X_2 \leq 60 \\ X_1 \geq 0; X_2 \geq 0 \end{cases} \end{aligned}$$



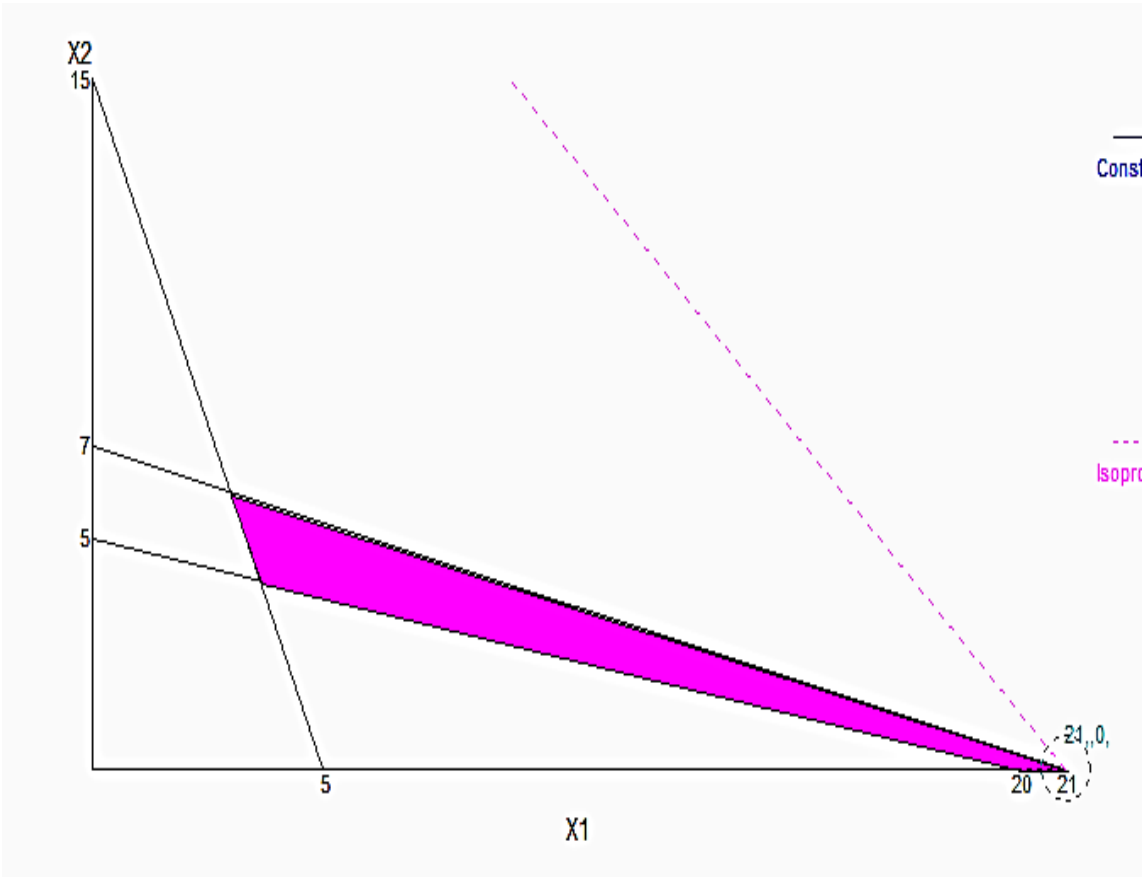
الحل الأمثل: $Z = 230$ ، $X_1 = 30$ ، $X_2 = 20$ ،

$$\begin{aligned} \text{Min: } Z &= 5X_1 + 4X_2 \\ \text{S / c } &\begin{cases} 2X_1 + 8X_2 \geq 40 \\ 6X_1 + 2X_2 \geq 30 \\ 3X_1 + 9X_2 \geq 63 \\ X_1 \geq 0; X_2 \geq 0 \end{cases} \end{aligned}$$



الحل الأمثل: ، $X_1 = 3$ ، $X_2 = 6$ ، $Z = 39$

$$\begin{aligned} \text{Max: } Z &= 5X_1 + 4X_2 \\ \text{s / c } &\begin{cases} 2X_1 + 8X_2 \geq 40 \\ 6X_1 + 2X_2 \geq 30 \\ 3X_1 + 9X_2 \leq 63 \\ X_1 \geq 0; X_2 \geq 0 \end{cases} \end{aligned}$$



الحل الأمثل: $Z = 105, X_1 = 21, X_2 = 0$