

$$\text{Max } Z = 10x_1 + 30x_2$$

$$S/C \left\{ \begin{array}{l} 3x_1 + 2x_2 \leq 6 \\ 6x_1 + 1x_2 \leq 14 \\ x_1 \geq 0, x_2 \geq 0 \end{array} \right.$$

$$\text{Max } Z = 180x_1 + 400x_2$$

$$S/C \left\{ \begin{array}{l} 2x_1 + 5x_2 \leq 160 \\ 4x_1 + 6x_2 \leq 240 \\ x_1 \geq 0, x_2 \geq 0 \end{array} \right.$$

$$\text{Max } Z = 6x_1 + 4x_2$$

$$S/C \left\{ \begin{array}{l} 2x_1 + 2x_2 \leq 6 \\ 2x_1 - 4x_2 \leq 2 \\ x_1 \geq 0, x_2 \geq 0 \end{array} \right.$$

ياستعمال الطريقة المبسطة أوجد إن أمكن الحل الأمثل للبرامج التالية:

$$\text{Max } Z = 6x_1 + 8x_2$$

$$S/C \left\{ \begin{array}{l} 2x_1 + 4x_2 \leq 24 \\ 2x_1 + 2x_2 \leq 40 \\ 2x_1 + 2x_2 \leq 15 \\ x_1 \geq 0, x_2 \geq 0 \end{array} \right.$$

$$\text{Max } Z = 4x_1 + 5x_2 + 3x_3$$

$$S/C \left\{ \begin{array}{l} 2x_1 - 3x_2 + x_3 \leq 4 \\ 3x_1 + 2x_2 + x_3 \leq 6 \\ x_1 + x_2 + x_3 \leq 10 \\ x_1 \geq 0, x_2 \geq 0, x_3 \geq 0 \end{array} \right.$$

$$\text{Max } Z = 6x_1 + 10x_2 + 3x_3$$

$$S/C \left\{ \begin{array}{l} 5x_1 + 3x_2 + 4x_3 \leq 15 \\ 2x_1 + 4x_2 + 6x_3 \leq 8 \\ x_1 + x_2 + 4x_3 \leq 4 \\ x_1 \geq 0, x_2 \geq 0, x_3 \geq 0 \end{array} \right.$$