2.1.1 - PAG 24.

MAX $4x_1 + 3x_2$ ⑥

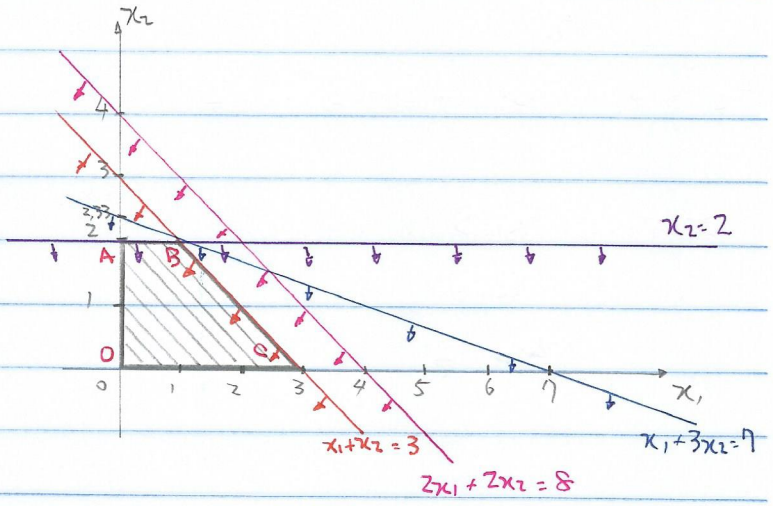
SUJEITO A $x_1 + 3x_2 \leq 7$ ⑤

$2x_1 + 2x_2 \leq 8$ ④

$x_1 + x_2 \leq 3$ ③

$x_2 \leq 2$ ②

$x_1, x_2 \geq 0$ ①



② $x_2 \leq 2$

$x_2 = 2$

③ $x_1 + x_2 \leq 3$

$x_1 + x_2 = 3$

x_1	x_2
0	3
3	0

④ $2x_1 + 2x_2 \leq 8$

$2x_1 + 2x_2 = 8$

x_1	x_2
0	4
4	0

⑤ $x_1 + 3x_2 \leq 7$

$x_1 + 3x_2 = 7$

x_1	x_2
0	$7/3$
7	0

⑥ Max $4x_1 + 3x_2$

$(0,0)$ - MAX = $4.0 + 3.0 = 0$.

A $(0,2)$ - MAX = $4.0 + 3.2 = 6$.

B $\begin{cases} x_2 = 2 \\ x_1 + x_2 = 3 \end{cases}$ B$(1,2)$ - MAX = $4.1 + 3.2 = 10$

$x_1 + 2 = 3$

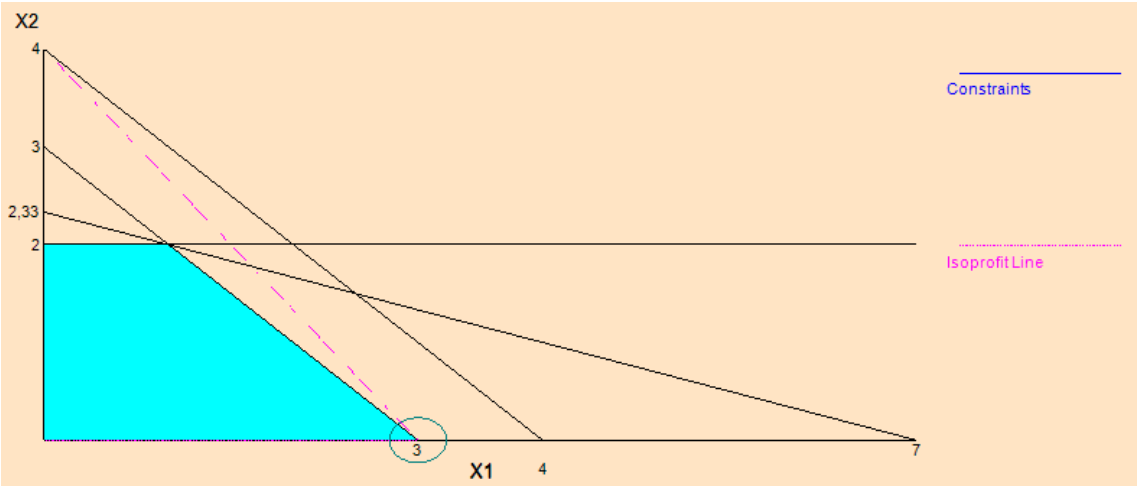
$x_1 = 1$

C$(3,0)$ - MAX = $4.3 + 3.0 = 12$

RESPOSTA: $x_1 = 3$

$x_2 = 0$

MAX = 12.



Constraint Display

- Max 4X1+3X2
- 1X1+3X2<=7
- 2X1+2X2<=8
- 1X1+1X2<=3
- 1X2<=2
- none

X1	X2	Z
0	0	0
3	0	12
0	2	6
1	2	10