

EX 2.1.1 - PAG 24

PASSAR PARA O DUAL

$$\text{MAX } Z = 4x_1 + 3x_2$$

$$\text{SA } x_1 + 3x_2 \leq 7 \quad y_1$$

$$2x_1 + 2x_2 \leq 8 \quad y_2$$

$$x_1 + x_2 \leq 3 \quad y_3$$

$$x_2 \leq 2 \quad y_4$$

$$x_1, x_2 \geq 0$$

FORMA PADRÃO

$$-Z + 4x_1 + 3x_2 = 0$$

$$x_1 + 3x_2 + x_{t1} = 7$$

$$2x_1 + 2x_2 + x_{t2} = 8$$

$$x_1 + x_2 + x_{t3} = 3$$

$$x_2 + x_{t4} = 2$$

DUAL

$$\text{MIN } W = 7y_1 + 8y_2 + 3y_3 + 2y_4$$

$$\text{SA. } y_1 + 2y_2 + y_3 \geq 4$$

$$3y_1 + 2y_2 + y_3 + y_4 \geq 3$$

PADRÃO DUAL

$$-W + 7y_1 + 8y_2 + 3y_3 + 2y_4 = 0$$

$$y_1 + y_2 + y_3 + 0y_4 + y_{a1} - y_{b1} = 4$$

$$3y_1 + 2y_2 + y_3 + y_4 + y_{a2} - y_{b2} = 3$$

BASE	y_1	y_2	y_3	y_4	y_{t1}	y_{t2}	y_{a1}	y_{a2}	RHS
y_{a1}	1	1	1	0	-1	0	1	0	4
y_{a2}	3	2	1	1	0	-1	0	1	3
FOA	4	3	2	1	-1	-1	1	1	7
-W	7	8	3	2	0	0	0	0	0