

PROBLEMA DUAL

PROBLEMA PRIMAL

F.O: Max

$$Z= 2X +3Y$$

s.a

$$2X + 3Y \leq 12$$

$$3X -5Y \leq 30$$

$$X, Y \geq 0$$

F.O: Max

$$Z= 3X - Y$$

s.a

$$-X + 2Y \geq 5$$

$$X + 3Y \leq -2$$

$$X, Y \geq 0$$

F.O: Max

$$Z= 30X +4Y$$

s.a

$$2X + 3Y = 6$$

$$4X + 5Y \geq 8$$

$$3X - Y \leq 10$$

$$\leq 0, Y_3 \geq 0$$

$$X, Y \geq 0$$

PROBLEMA DUAL

F.O: MIN

$$W= 12Y_1 +30Y_2$$

s.a

$$2Y_1 + 3Y_2 \geq 2$$

$$3Y_1 - 5Y_2 \geq 3$$

$$Y_1, Y_2 \geq 0$$

F.O: MIN

$$W= 5Y_1 -2Y_2$$

s.a

$$-Y_1 + Y_2 \geq 3$$

$$2Y_1 + 3Y_2 \geq -1$$

$$Y_1 \leq 0, Y_2 \geq 0$$

F.O: MIN

$$W= 6Y_1 + 8Y_2 +10Y_3$$

s.a

$$2Y_1 + 4Y_2 + 3Y_3 \geq 30$$

$$3Y_1 + 5Y_2 - Y_3 \geq 4$$

$$Y_1 \text{ No restringida, } Y_2$$

F.O Max

$$\mathbf{Z= 7X + 4Y}$$

Lim:

$$\mathbf{2X + Y \leq 10}$$

$$\mathbf{2X + 3Y \leq 24}$$

$$\mathbf{3X + Y \leq 12}$$

$$\mathbf{X, Y \geq 0}$$

S.O

$$\mathbf{Z= 77/2}$$

$$\mathbf{Y1= 4 - 3(1 / 4)}$$

V.O

$$\mathbf{Y1 = 13/4}$$

$$\mathbf{X= 3/2}$$

$$\mathbf{Y= 7}$$

$$\mathbf{H1=0}$$

$$\mathbf{H2=0}$$

$$\mathbf{H3= 1 / 2}$$

F.O Min

$$\mathbf{W= 10Y1 + 24Y2 + 12Y3}$$

Lim

$$\mathbf{2Y1 + 2Y2 + 3Y3 \geq 7}$$

$$\mathbf{Y1 + 3Y2 + Y3 \geq 4}$$

$$\mathbf{Y1, Y2, Y3 \geq 0}$$

$$\mathbf{2Y1 + 2Y2 = 7}$$

$$\mathbf{Y1 + 3Y2 = 4}$$

$$\mathbf{2Y1 + 2Y2 = 7}$$

$$\mathbf{-2Y1 - 6Y2 = -8}$$

$$\mathbf{-4Y2 = -1}$$

$$\mathbf{Y2= 1 / 4}$$

$$\mathbf{Y3= 0}$$

$$\mathbf{W= 10(13/4) + 24(1 / 4)}$$

$$\mathbf{W = 77 / 2}$$