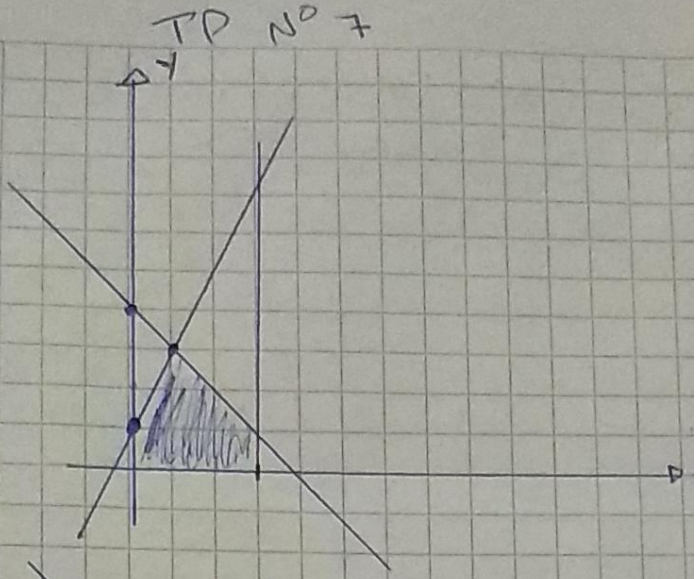
TP Nº 7

1) $y \leq -2x + 1$

$y \leq 4 - x$

$0 \leq x \leq 3$

$y \geq 0$



2) A) $F(x,y) = x + y$

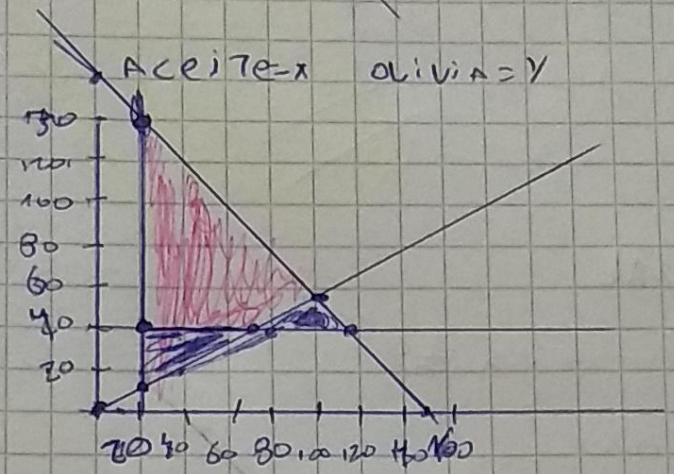
$20 \leq x$

$40 \leq y$

$y \geq \frac{1}{2} x$

$x + y \leq 150$

LO ROSA ES EL RESULTADO



(20; 40) | 60 DE GASTO | MÍN

(80; 40) 120 DE GASTO

(20; 130) | 150 DE GASTO | MÁX

(100; 50) | 150 DE GASTO | MÁX

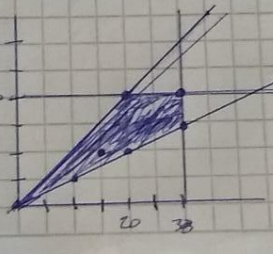
b) X = MECANICOS Y = ELEC. $F(x,y) = 200x + 250y$

$Y \leq X$

$X \leq 2Y$

$X \leq 30$

$Y \leq 20$



(0;0) 0 TRABAJADORES Y GANANCIA

(30;20) 11000 GANANCIA

(20;20) 9000 GANANCIA

(30;15) 9750 GANANCIA

$x \leq 30$

$x \leq y$

$y \leq 20$

$\boxed{x = 20}$

$\frac{1}{2} x \leq y$

$x \leq 30$

$\frac{1}{2} \cdot 30 \leq y$

c) $F(x,y)\ 270x + 210y$

SOLDADOS = x

TRENES = y

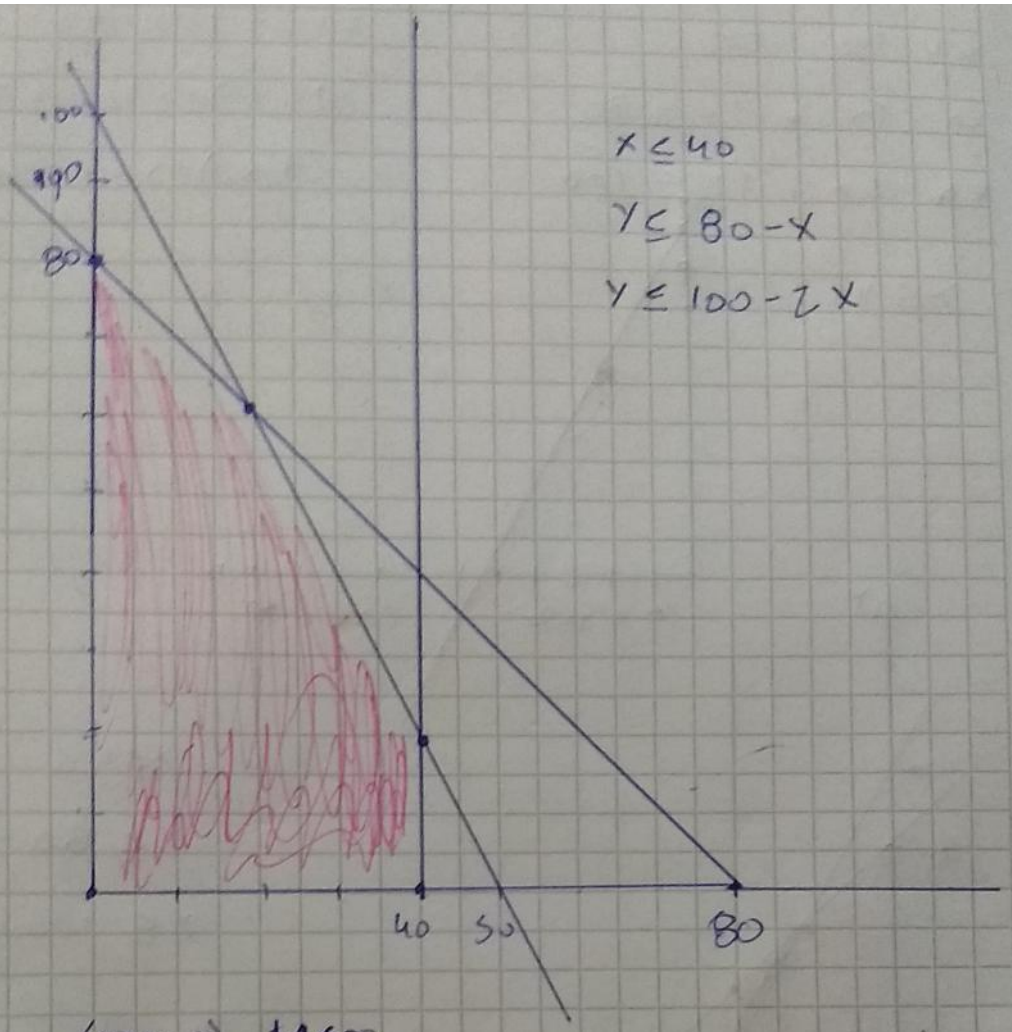
	x	y
MP	100	90
CL	140	100
CA	$1x + 1y \geq 80$	
PA	$2x + 1y \leq 100$	

RESTO LOS GASTOS

$270 - 100 - 140 = 30$

$210 - 90 - 100 = 20$

$F(x,y) = 30x + 20y$



$x \leq 40$

$y \leq 80 - x$

$y \leq 100 - 2x$

(0;80) $1600

(40;0) $1200

(40;20) $1600

(20;60) $1800

* $y = 100 + 2 \cdot 40$

$y = 20$

$80 - x = 100 - 2x$

$x = 20$

$y = 80 - 20$

$y = 60$