9. Minimalkan $Z = 22x + 6y$

$11x + 3y \geq 33$

$8x + 5y \leq 40$

$7x + 10y \leq 70$

$x \geq 0$

$y \geq 0$

	Iterasi	Cj	CB	Fungsi tujuan	x_1	x_2	x_3	x_4	x_5	RHS
	0	2	CB	22	0	0	0	0	0	0
	1	2	x_3	22	11	3	-1	0	0	33
	2	2	x_4	22	8	5	0	1	0	40
	3	2	x_5	22	7	10	0	0	1	70
	4	2	x_1	22	1	5/2	0	-1/2	0	5
	0	2	CB	22	0	0	0	0	0	0
	1	2	x_1	22	3	0	-1	2	0	11
	2	2	x_4	22	3	5	-1	1	0	40
	3	2	x_5	22	7	10	1	0	1	70
	4	2	x_3	22	1	5/2	0	-1/2	0	5
	0	2	CB	22	0	0	0	0	0	0
	1	2	x_1	22	2	0	-1	1	0	10
	2	2	x_2	22	1	2	0	2	0	20
	3	2	x_5	22	3	8	0	-5	1	50
	4	2	x_3	22	6	2	0	-1	0	10

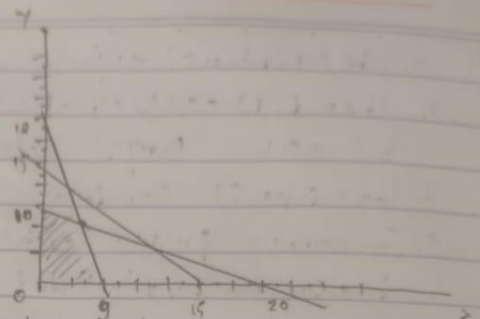
Optimal $= x_1 = 2$ $\quad Z = 22(2) + 6(60) = 44 + 80 = 104$

$x_2 = 6$

Atif

2. Max = $Z = 3x + 2y$

- $x + y \leq 15$ (1)
- $2x + y \leq 18$ (2)
- $x + 2y \leq 20$ (3)
- $x \geq 0$
- $y \geq 0$



(1) $x + y = 15$

x	0	15
y	15	0

(0,15) (15,0)

(2) $2x + y \leq 18$

x	0	9
y	18	0

(0,18) (9,0)

(3) $x + 2y \leq 20$

x	0	20
y	10	0

garis iso profit

$3x + 2y$ = konstan

$3x + 2y = 0 + 2 + 32$

$Z = 30$

Solusi optimal

$x + 2y = 20$

$2x + y = 18$ −

$-x + y = 2$

$y = 16$

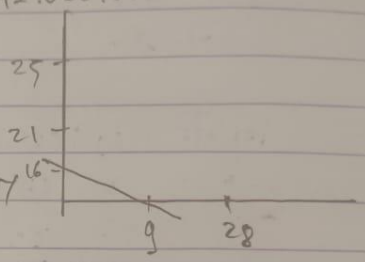
3. $x \& y \neq 0$

$x + y \leq 25 \quad x = 25.0 \quad y = 0.25$

$1500.000x + 2.000.000y \leq 42.000.000$

$15x + 20y \leq 420$

$3x + 4y \leq 84$



• $F(x,y) = 500.000x + 500.000y$

$3x + 4y \leq 84 \quad x = 28.0 \quad y = 0.21$

$x + y = 25 \mid \times 4 \mid 4x + 4y = 100$

$3x + 4y = 84 \mid \times 1 \mid 3x + 4y = 84$

$x = 16$

$16 + y = 25$

$= 25 - 16 = 9 \qquad (16, 9)$

dengan fungsi kendala

$F(0,0) = 0$

$f(25.0) = 12.500.000$

$f(16,9) = 13.400.000$ ← jawaban maksimal

$f(0,21) = 12.600.000$

Data :

a. Identifikasi tujuan
b. Identifikasi Variabel keputusan
c. Susunan Fungsi Tujuan
d. Identifikasi kendala
e. Gambaran grafik kendala
f. tentukan titik & Sudut daerah
g. evaluasi
h. pilih Solusi optimal
i. Kesimpulan
j. Implementasi dan evaluasi