

$$\text{MAX } Z = 6X_1 + 4X_2$$

$$2X_1 + 3X_2 \leq 120$$

$$4X_1 + 2X_2 \leq 100$$

$$X_1 \leq 10$$

$$X_2 \geq 20$$

$$X_1, X_2 \geq 0$$

$$\text{MINC} = 5X_1 + 6X_2 + 7X_3$$

$$X_1 \leq 300$$

$$X_2 \geq 150$$

$$X_3 \geq 200$$

$$X_1 + X_2 + X_3 = 1000$$

$$X_1, X_2, X_3 \geq 0$$

MAXZ

			6	4	0	0	-M	0	-M	
			X1	X2	A1	A2	A3	A4	A5	
0	A1	120	2	3	1	0	0	0	0	60
0	A2	100	4	2	0	1	0	0	0	25
-M	A3	10	1	0	0	0	1	0	0	10
-M	A5	20	0	1	0	0	0	-1	0	
Z = -30M			-M-6	-M-4	0	0	0	+M	0	

			6	4	0	0	-M	0	-M	
			X1	X2	A1	A2	A3	A4	A5	
0	A1	10	0	0	1	3/2	+4	0	0	
0	A4	10	0	0	0	1/2	-2	1	-1	
6	X1	10	1	0	0	0	1	0	0	
4	X2	30	0	1	0	1/2	2	0	0	
Z = 180			0	0	0	2	M+14	0	+M	

MINC

			5	6	7	0	0	M	0	M	M	
			X1	X2	X3	A1	A2	A3	A4	A5	A6	
0	A1	300	1	0	0	1	0	0	0	0	0	∞
M	A3	150	0	1	0	0	-1	1	0	0	0	150
M	A5	200	0	0	1	0	0	0	-1	1	0	∞
M	A6	1000	1	1	1	0	0	0	0	0	1	1000
C = 1350M			M-5	2M-6	2M-7	0	-M	0	-M	0	0	

			5	6	7	0	0	M	0	M	M	
			X1	X2	X3	A1	A2	A3	A4	A5	A6	
5	X1	300	1	0	0	1	0	0	0	0	0	∞
6	X2	150	0	1	0	-1	0	0	1	0	1	-150
7	X3	200	0	0	1	0	0	0	-1	1	0	∞
0	A2	650	0	0	0	-1	1	-1	1	-1	1	350
C = 5900			0	0	0	-1	0	-M	-M	1-M	6-M	

