standard Form:

-	_Z	1 1	2	-1	-4	0	M	Μ.	0 1	0
Person	01	0	3	+1	-1	-1	1	9	0 1	0
	az	0	2	, 2	+1	10	0	1	0 =	
~	5	0	1	-1	0	0	0	10	1 =	1

In First table we should get vid of "M" in the Base Column (means: a, 202)

	-1	tuone *	21 (212	94 '	01	a1 '	an i	5	5	RHS
-MY2+1/4->1/1	7	1 (-5 M+2	-3M-1	-4	W	0	(0)	0	+	-7M
 -MB+4 >4	01	0	3	+1	-4	1	1	101	0	=	2
3.7	02	0	2	12	+1	0	10	(1	0	=	5
	6-	9	1	1 -1	0	0	0	0	1	+	1
	•		1			1		(1	

Mow creeking "optimality condition"

Most Negative Coeff is for M. / Minimum Test: Min [3] [2] 17

60 M. should inder the table & as leave it.

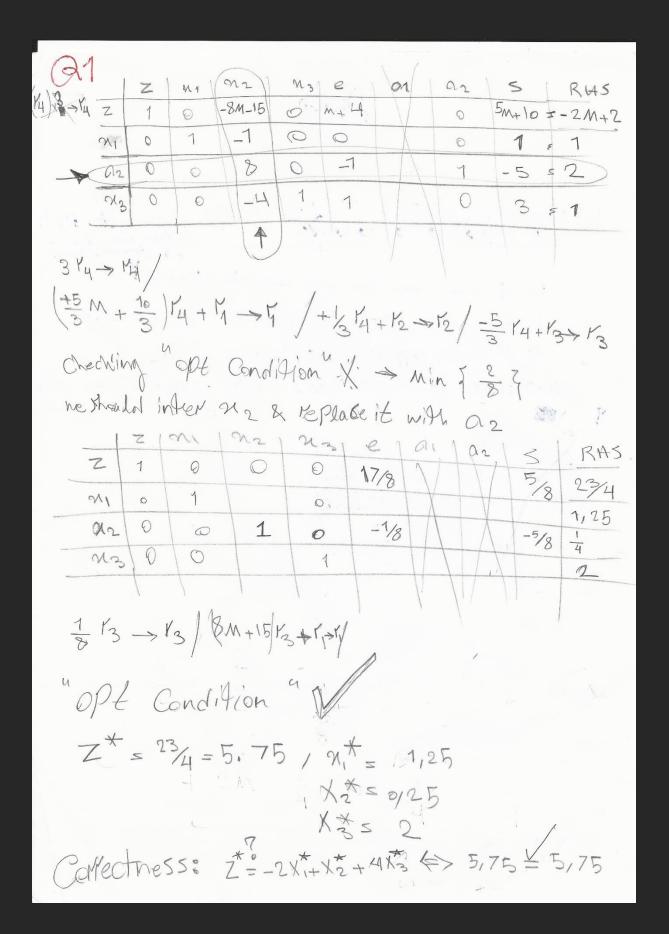
Zin. 22 (23) e 1 al a2 5 | RHS:

Z 1 0 3 - 3 - 12 - 13 0 0 = 2/3 | 3 + 14 > 14

Min 0 1 1 13 - 13 - 13 + 13 0 0 = 2/3 | -2 + 13 > 14

A2 0 0 4 3 3 2 2 3 2 1 1 0 1 = 1/3 | -1 + 14

Optimality "X Min 1 1/3 x 3 5 1/



Q2) set of solutions : (X1 ,X2 ,X3 ,X4) = { (2,3,0,0)+ a(1,2,1,0) s.t a>=0 }

- Q3) because we still have an artificial variable (a2) in our final table and we can't get rid of it (and also we can't get rid of M in the right hand side of Z row), so we have **no feasible solution** problem.
- Q4) 121 / because each increasing of value of Xj can increase 7 unit of Z value and overall, maximum value that Xj can have (Xj*) is 3 so we will have 121 for our final Z right hand side.

Thank you.

mohamadreza ardestani_9513004