

$$\max z = 3x_1 + 5x_2$$

$$\text{uz } 2x_1 + 3x_2 \leq 5$$

$$1x_1 + 5x_2 \geq 3$$

$$2x_1 + 3x_2 = 3$$

$$x_1 \geq 0$$

$$x_2 \geq 0$$

z

y1

y2

y3

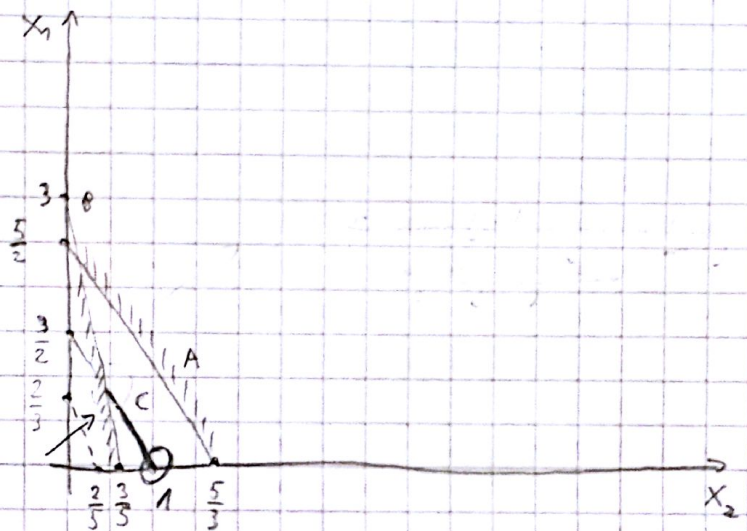
y4

1.

$$\frac{x_1}{\frac{5}{2}} + \frac{x_2}{\frac{5}{3}} \leq 1 \quad A$$

$$\frac{x_1}{3} + \frac{x_2}{\frac{3}{5}} \geq 1 \quad B$$

$$\frac{x_1}{\frac{3}{2}} + \frac{x_2}{1} = 1 \quad C$$



$$z = 3x_1 + 5x_2 \quad 1/2$$

$$1 = \frac{x_1}{\frac{2}{3}} + \frac{x_2}{\frac{2}{5}}$$

jer je - $x_1 = 0, x_2 = 1$

jer je fronta rasta strmija ($\frac{z}{3} = \frac{5}{3}$) od feasibility segmenta ($\frac{3}{2}$)

$$\max z = 3 \cdot 0 + 5 \cdot 1 = 5$$

$$\max z = 3x_1 + 5x_2$$

→

$$z - 3x_1 - 5x_2 = 0$$

2

$$2x_1 + 3x_2 \leq 5$$

→

$$2x_1 + 3x_2 + x_3 = 5$$

1'

$$2x_1 + 3x_2 = 3$$

→

$$-x_1 - 5x_2 + x_4 = -3$$

$$x_1 + 5x_2 \geq 3$$

→

$$x_1, x_2 \geq 0$$

→

$$x_2 \geq 0$$

→

$$2x_1 + 3x_2 \leq 3$$

$$2x_1 + 3x_2 + x_5 = 3$$

$$2x_1 + 3x_2 \geq 3$$

$$-x_1 - 5x_2 + x_4 = -3$$

$$-2x_1 - 3x_2 \leq -3$$

$$-2x_1 - 3x_2 + x_6 = -3$$

$$+x_6 = -3$$

0

BAZA	z	x ₁	x ₂	x ₃	x ₄	x ₅	x ₆	
z	1	-3	-5					0
x ₃		2	3	1				5
x ₄		-1	(-5)		1			-3 3/5 : -5
x ₅		2	3			1		3
x ₆		-2	-3				1	-3

1

z	1	-2			-1			3
x ₃		7/5		1	3/5			16/5 2.28
x ₂		1/5	1		-1/5			3/5 3
x ₅		(3/5)			2/5	1		6/5 6/3 = 2 : 1 : 3/5
x ₆		-7/5			-3/5		1	-6/5

2

z	1				-1/7	10/7		23/7
x ₃				1	0	-1		2 ∞
x ₂			1		-2/7	-1/7		3/7 -3/2
x ₁		1			(3/7)	5/7		6/7 2 : 1 : 3/7
x ₆					0	1	1	0

3

z	1	1/3				5/3		5
x ₃				1		-1		2
x ₂		2/3	1			0	1/3	1
x ₄		3/3				1	5/3	2
x ₆						0	1	1

→ max z = 5
x₁ = 0, x₂ = 1

Postavio default TOLER

LPE -- Total of 19 records read

Goal function z is in row 1
Row count = 5
Column count = 2
Structural coefficients count = 10
Matrix density = 100.000000 %
Lower bounds count = 3
Upper bounds count = 2

Amax = 1.000000 Amin = 0.300000

No primal errors
Maximum dual error : 0
Solution is feasible
Maximum has been reached
** P00000 *Prva DZ

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*** Rows ***

No. Row	In At	Activity	Lower Bound	Upper Bound	Slack	Activ.	Dual	Activity	Description
1 z	2 b	5	NONE	NONE	-5		0		
2 y1	2 b	3	0	5	2		0		
3 y2	2 b	5	3	NONE	2		0		
4 y3	2 u	3	0	3	0		1.666667		
5 y4	2 b	3	3	NONE	0		0		

** P00000 *Prva DZ

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*** Columns ***

No. Column	In At	Activity	Lower Bound	Upper Bound	Objective Co.	Reduced Cost	Description
15001 x1	5 1	0	0	NONE	3	-0.3333333	
15002 x2	5 b	1	0	NONE	5	0	