

$$\begin{cases} 2x_1 + 2x_2 - x_3 + t_1 = 8 \\ x_2 + t_2 = 3 \\ 9x_1 + 3x_2 + x_4 = 27 \\ x_1, x_2, x_3, x_4, t_1, t_2 \geq 0 \end{cases}$$

$$\max(-t_1 - t_2)$$

$$\text{Max } z = 4x_1 + 5x_2$$

	x_1	x_2	x_3	x_4	t_1	t_2	b
t_1	2	2	-1	0	1	0	8
t_2	0	1	0	0	0	1	3
x_4	9	3	0	1	0	0	27
c^T	0	0	0	0	-1	-1	0

$$L_4' \leftarrow L_4 + L_1 + L_2$$

$$2 \quad 3 \quad -1 \quad 0 \quad 0 \quad 0 \quad 11$$

$$27 - 9 = 18$$

	x_1	x_2	x_3	x_4	t_1	t_2	b
t_1	2	0	-1	0	1	-2	2
x_2	0	1	0	0	0	1	3
x_4	9	0	0	1	0	-3	18
c^T	2	0	-1	0	0	-3	2

$$L_1' \leftarrow L_1 - 2L_2$$

$$L_2' \leftarrow L_2$$

$$L_3' \leftarrow L_3 - 3L_2$$

$$L_4'' \leftarrow L_4' - 3L_2$$

$$\begin{matrix} -3+9 \\ " \\ 6 \end{matrix}$$

	x_1	x_2	x_3	x_4	t_1	t_2	b
x_1	1	0	-1/2	0	1/2	-1	1
x_2	0	1	0	0	0	1	3
x_4	0	0	9/2	1	-9/2	6	9
c^T	0	0	0	0	-1	-1	0

$$L_1'' \leftarrow L_1' / 2$$

$$L_3'' \leftarrow L_3' - 9L_1'$$

$$L_4''' \leftarrow L_4'' - 2L_1''$$

	x_1	x_2	x_3	x_4	t_1	t_2	b
x_1	1	0	$-1/2$	0	$1/2$	-1	1
x_2	0	1	0	0	0	1	3
x_4	0	0	$9/2$	1	$-9/2$	6	9
c^T	4	5	0	0	-1	-1	0

$$\text{Max } z = 4x_1 + 5x_2$$

$$0 \quad 0 \quad 2 \quad 0 \quad -19$$

$$L_4' \leftarrow L_4 - 4L_1 - 5L_2$$

	x_1	x_2	x_3	x_4	t_1	t_2	b
x_1	1	0	0	$1/9$	$1/2$	-1	2
x_2	0	1	0	0	0	1	3
x_3	0	0	1	$2/9$	$-9/2$	6	2
c^T	0	0	0	$-4/9$	-1	-1	-23

$$L_1' \leftarrow L_1 + \frac{1}{2}L_3'$$

$$L_3' \leftarrow \frac{2}{9}L_3$$

$$L_4'' \leftarrow L_4' - 2L_3'$$