$Z = 2x + 2y - 5z \rightarrow \min$

$$\begin{array}{rcl|l} 2x - 2y + 3z & \geq & 12 & - s_1 \\ -x + y - z & \leq & 2 & + s_2 \\ 2x - y + 2z & = & 24 & \\ x, y, z & \geq & 0 & \end{array}$$

$Z_1 = -Z = -2x - 2y + 5z + 0\cdot s_1 + 0\cdot s_2 \rightarrow \max$

$$\begin{array}{rcl|l} 2x - 2y + 3z - s_1 & = & 12 & \text{III - I} \\ -x + y - z + s_2 & = & 2 & \\ 2x - y + 2z & = & 24 & + a \\ x, y, z, s_1, s_2 & \geq & 0 & \end{array}$$

$Z_2 = -Z = -2x - 2y + 5z + 0\cdot s_1 + 0\cdot s_2 - Ma \rightarrow \max$

$$\begin{array}{rcl} y - z + s_1 & = & 12 \\ -x + y - z + s_2 & = & 2 \\ 2x - y + 2z + a & = & 24 \\ x, y, z, s_1, s_2, a & \geq & 0 \end{array}$$

		-2	-2	5	0	0	-M				
Б К	Б П	x	y	z↓	s_1	s_2	a	ОБР	Θ_x	Θ_z	
0	s_1	0	1	-1	1	0	0	12	-	-	$\Delta Z_x = -(2-2M)\cdot 12 =$ **-24+24M**
0	s_2	-1	1	-1	0	1	0	2	-	-	$\Delta Z_z = -(-5-2M)\cdot 12 =$ 60+24M
-M	←a	2	-1	2	0	0	1	24	12	12	
	Δj	2	2	-5	0	0	0	0			
	$\Delta_{j\,M}$	*-2M*	*M*	*-2M*	*0*	*0*	*0*	-24M	Θ_y		
0	s_1	1	0,5	0	1	0		24	48		
0	←s_2	0	0,5	0	0	1		14	28		$\Delta Z_y = -(-0,5)\cdot 28 =$ **14**
5	z	1	-0,5	1	0	0		12	-		
	Δ_j	*7*	*-0,5*	*0*	*0*	*0*		60			
0	s_1	1	0	0	1	-1		10			
-2	y	0	1	0	0	2		28			
5	z	1	0	1	0	1		26			
	Δ_j	*7*	*0*	*0*	*0*	*1*		74			

$X_2^* =$ (0; 28; 26; 10; 0; 0) $\quad Z_2^* =$ 74

$X^* =$ (0; 28; 26) $\quad Z^* = -Z_1^* = -Z_2^* =$ -74