

Задача работы №10 (ТЗО)

$$C = \begin{pmatrix} 9 & 6 & 6 & 1 \\ 8 & 10 & 9 & 2 \\ 5 & 9 & 2 & 6 \end{pmatrix} \quad R = \begin{pmatrix} 15 & 10 & 34 & 4 \\ 31 & 23 & 20 & 11 \\ 11 & 15 & 4 & 10 \end{pmatrix}$$

$a = (64, 45, 21)$ $b = (57, 33, 44, 26)$

	Q1	Q2	Q3	Q4	a	a-x
P1	13 ⁹ 15	10 ⁶ 10	34 ⁶ 34	7 ¹ 7	64	57,47,13,0
P2	31 ⁸ 31	23 ¹⁰ 23	6 ⁹ 20	11 ² 11	75	64,33,27,4
P3	11 ⁵ 11	9 ⁹ 15	4 ² 4	6 ⁶ 10	21	17,6,0
b	57	33	44	26		
b-x	46,15,2	23,0	40,6,0	19,8,2		Omega=4

	Q1	Q2	Q3	Q4	Q5	a	u						
P1	13 ⁹ 15	10 ⁶ 10	34 ⁶ 34	7 ¹ 7	2M-9 M	64	2M-9		6	*	*	*	*
P2	31 ⁸ 31	23 ¹⁰ 23	6 ⁹ 20	11 ² 11	4 M	75	0		*	6	6	*	6
P3	11 ⁵ 11	9 ⁹ 15	4 ² 4	6 ⁶ 10	2M-6 M	21	2M-6		*	*	6	6	6
P4	2 M	10 M	9 M	2 M	0 0	4	M						
b	57	33	44	26	4								
v	2M	10	9	2M	M								

IKP:

$$\theta_1 = \min \{4, 2, 4\} = 2 = x_{44}$$

$$\theta_2 = \min \{20-6, \infty-0, 10-6\} = 4 = x_{34} - x_{34}$$

$$\theta = \min \{\theta_1, \theta_2\} = 2 = x_{44}$$

	Q1	Q2	Q3	Q4	Q5	a	u		6	*	5	*	*
P1	0 13 9 15	2M-13 6 10 10	2M-12 6 34 34	-8 7 1 7	2M-9 M 20	64	2M-9		*	6	6	*	6
P2	8-2M 8 31	0 10 23 23	0 9 20 8	-11 2 11	0 4 M 20	75	0		*	*	*	6	*
P3	12-2M 5 11	6 9 15	2M-13 2 4 2	0 6 8	7 M 20	21	7		6	*	*	6	6
P4	0 M 2	2M-10 M 20	2M-9 M 20	0 M 2	0 0 2	4	M						
b	57	33	44	26	4								
v	2M	10	9	13	M								

$\boxed{\text{II кр.}}$ $\theta_1 = \min \{2, 34, 2\} = 2 = x_{41}$
 $\theta_2 = \min \{15-13, 20-20, \infty-2\} = 2 = p_{11} - x_{11}$
 $\theta = \min \{\theta_1, \theta_2\} = 2 = x_{41}$

	Q1	Q2	Q3	Q4	Q5	a	u
P1	0 15 9 15	-1 10 6 10	0 32 6 34	-9 7 1 7	2M-9 M 20	64	3
P2	-4 31 8 31	0 10 23 23	0 9 20 10	-11 2 11	0 M 20	75	0
P3	-5 11 5 11	6 9 15	2M-13 2 4 2	0 6 8	7 M 20	21	7
P4	0 M 2	2M-10 M 20	2M-9 M 20	0 M 2	0 0 2	4	
b	57	33	44	26	4		
v	12	10	9	13			

$\boxed{\text{III кр.}}$ $x^* = \begin{pmatrix} 15 & 10 & 32 & 4 \\ 31 & 23 & 10 & 11 \\ 11 & 0 & 2 & 8 \end{pmatrix}$ $L_{\min} = 1091$