

Приписки уравнения.

$$\min [x_1 + 3, x_2/3 + 4, x_3 + 6, x_4/3 + 29] \rightarrow \max_{x \in M_0}$$

$$A = 21 \quad f_1(0) = 3, f_2(0) = 4, f_3(0) = 6, f_4(0) = 29$$

$$k=4$$

$$\begin{cases} x_1 + 3 = C \\ \frac{x_2}{3} + 4 = C \\ x_3 + 6 = C \\ \frac{x_4}{3} + 29 = C \end{cases} \Rightarrow \begin{cases} x_1 = C - 3 \\ x_2 = 3C - 12 \\ x_3 = C - 6 \\ x_4 = 3C - 87 \end{cases} \Rightarrow \begin{aligned} 21 &= 8C - 108 \\ C &= \frac{129}{8} \\ x_4 &= 3C - 87 = \frac{3 \cdot 129}{8} - 87 < 0 \end{aligned}$$

$$k=5 \quad x_4 = 0$$

$$21 = 5C - 21, \quad C = \frac{42}{5} < f_4(0) = 29$$

$$x_1^0 = C - 3 = \frac{27}{5}, \quad x_2^0 = 3C - 12 = \frac{66}{5}, \quad x_3^0 = \frac{12}{5}, \quad x_4^0 = 0$$

Дискретный максимум Начальное приближение

$$x^{(1)} = (5, 13, 2, 1) \quad \text{Другие } x^{(1)} = (5, 13, 3, 0)$$

i	$x_i^{(1)}$	$f_i(x_i^{(1)})$	$f_i(x_i^{(1)} - 1)$	$x_i^{(2)}$	$f_i(x_i^{(2)})$	$f_i(x_i^{(2)} - 1)$
1	5	8	7	6	9	8
2	13	$13/3 + 4$	8	13	$13/3 + 4$	8
3	2	8	7	2	8	7
4	1	$29 + \frac{1}{3}$	<u>29</u>	1	—	—

$$\min [x_1 + 5, x_2/3 + 4, x_3 + 6, x_4/3 + 29]$$

$$x^* = (6, 13, 2, 0)$$

$$x^{**} = (5, 13, 3, 0) \quad \text{Также опт.}$$