

# Могучо 1 ТУАМ

№1. ЛРФ

$$f(x_1, x_2, x_3) = x_3^{x_2 + x_1}$$

$$S(\otimes, I_3^3, S(\oplus, I_2^3, I_1^3))$$

$$\oplus: R(I_1^1, S^2(S, I_3^3))$$

$$\otimes: R(S^2(S, 0), S^3(\otimes, I_1^3, I_3^3))$$

$$\otimes: R(0, S^3(\oplus, I_3^3, I_1^3))$$

№2. ЦРФ

$$f(x_1, x_2, x_3) = \lfloor \sqrt{x_3} \rfloor$$

$$x_4 = \lfloor \sqrt{x_3} \rfloor$$

$$x_4 \leq \sqrt{x_3} < x_4 + 1$$

$$x_4^2 \leq x_3 < (x_4 + 1)^2$$

$$\mu_{x_4}(x_3 + 1 \leq (x_4 + 1)^2) \Rightarrow \mu_{x_4}(x_3 + 1) \div (x_4 + 1)^2 = 0$$

$$M(S^3(\ominus, S^2(S, I_3^4), S^3(\otimes, S^2(S, I_4^4), S^2(S, S^2(S, 0))))$$

$$\ominus: R(I_1^1, S^2(R(0, I_1^1), I_3^3))$$

№4. Матрица Суперинга

предмет "x=3"

$$[\lambda \lambda \lambda | 11111 | \lambda \lambda \lambda] \quad T = \{ \overset{0}{\lambda}, \overset{1}{\lambda}, \overset{1}{i} \} \quad Q = \{ \overset{0}{f_0}, \overset{1}{f_1}, \overset{2}{f_2}, \overset{3}{f_3}, \overset{4}{f_4}, \overset{5}{f_5} \}$$

$$\begin{aligned} f_0 \lambda &\rightarrow f^* \lambda \\ f_0 1 &\rightarrow f_1 \lambda R \\ f_1 \lambda &\rightarrow f^* \lambda \\ f_1 1 &\rightarrow f_2 \lambda R \\ f_2 \lambda &\rightarrow f^* \lambda \\ f_2 1 &\rightarrow f_3 \lambda R \\ f_3 \lambda &\rightarrow f^* \lambda \\ f_3 1 &\rightarrow f_4 \lambda R \\ f_4 \lambda &\rightarrow f^* \lambda \\ f_4 1 &\rightarrow f_5 \lambda R \end{aligned}$$

$$a_0 = 3C^4(\overset{0}{0}, \overset{0}{0}, \overset{5}{5}, \overset{0}{0}) = 3 \cdot 135 = 405$$

$$a_1 = 3C^4(\overset{0}{0}, \overset{1}{1}, \overset{1}{1}, \overset{0}{0}) + 2 = 3 \cdot 14 + 2 = 44$$

$$a_2 = 3C^4(\overset{1}{1}, \overset{0}{0}, \overset{5}{5}, \overset{0}{0})$$

$$a_3 = 3C^4(\overset{1}{1}, \overset{2}{2}, \overset{1}{1}) + 2$$

$$a_4 = 3C^4(2, 0, 5, 0)$$

$$a_5 = 3C^4(2, 1, 3, 0) + 2$$

$$a_6 = 3C^4(3, 0, 5, 1)$$

$$a_7 = 3C^4(3, 1, 4, 0) + 2$$

$$a_8 = 3C^4(4, 0, 5, 0)$$

$$a_9 = 3C^4(4, 1, 4, 0) + 2$$

$$C(x, y) = \frac{(x+y)(x+y+1)}{2} + x$$

$$a_1 = \left( \frac{0+1}{2} + 0 \right) \Rightarrow \left( \frac{0+5 \cdot 6}{2} + 0 \right) \Rightarrow \left( \frac{15 \cdot 16}{2} + 15 \right) \cdot 3$$

Аналогично  $a_2, \dots, a_9$

$$P(m) = 2 + 2 + \dots + 2$$

$$a_1 + a_2 + \dots + a_9 + 9 - 1$$



№ 3 Система Фрета

$$f(x) = x^3 + 6x$$

$$f(x+1) = (x+1)^3 + 6x + 6 = x^3 + 3x^2 + 3x + 1 + 6x + 6 = f(x) + 3x^2 + 3x + 7$$

$$P = \{ A * S * R \rightarrow A | * S A A | * R S S S A A A \text{|||||} \}$$

$$A * S * R \rightarrow A \# R \}$$

$$A_X = \{ *, * \}, T = \{ *, \#, | \}$$