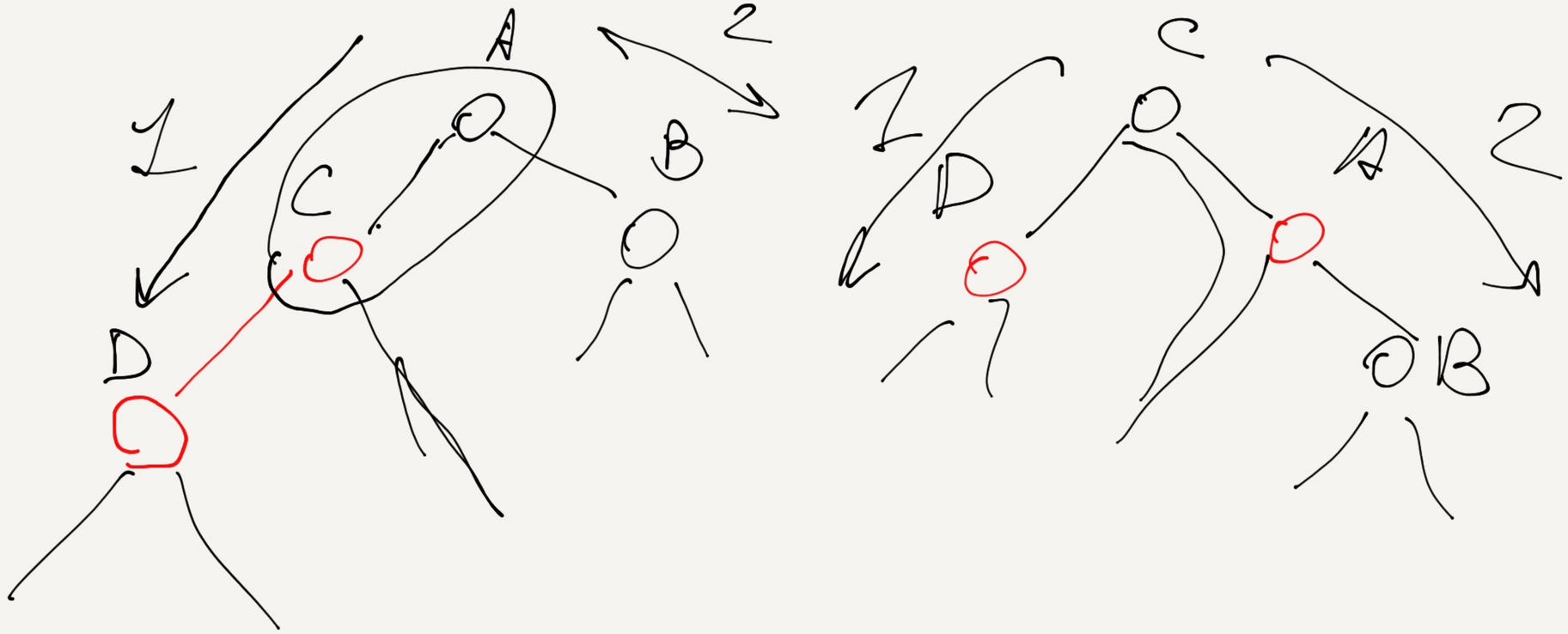
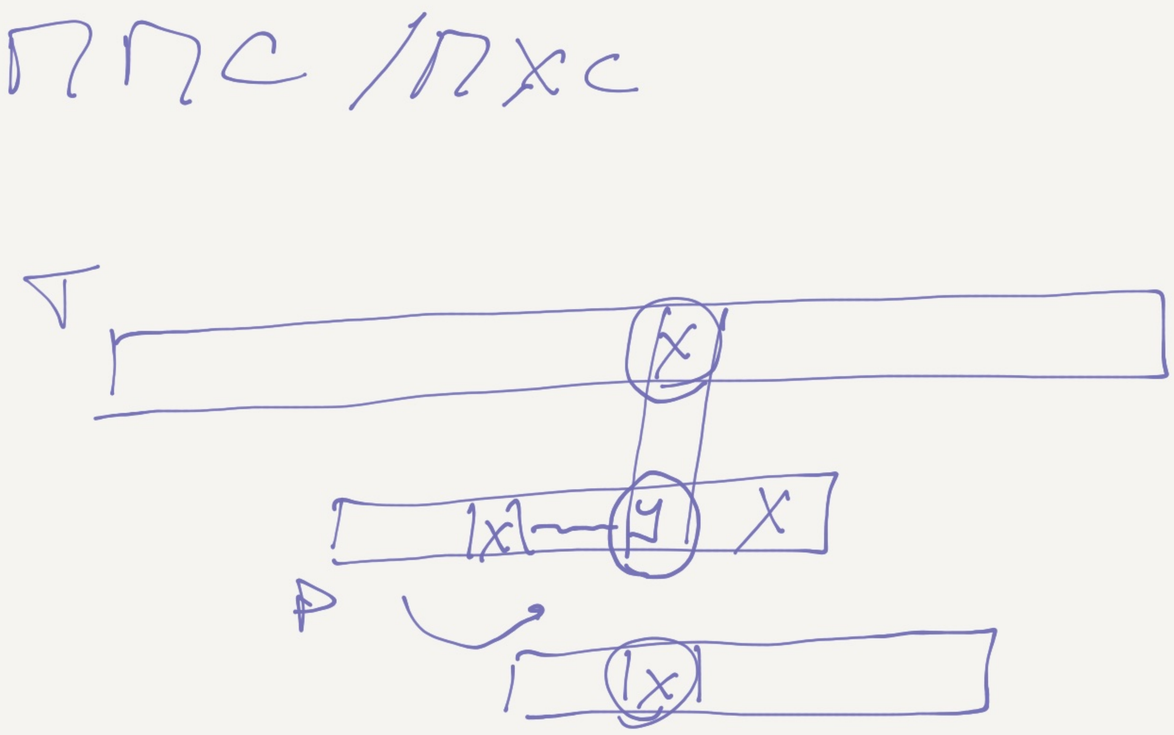
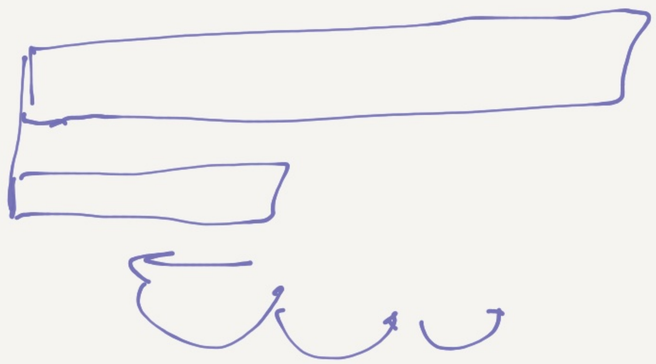
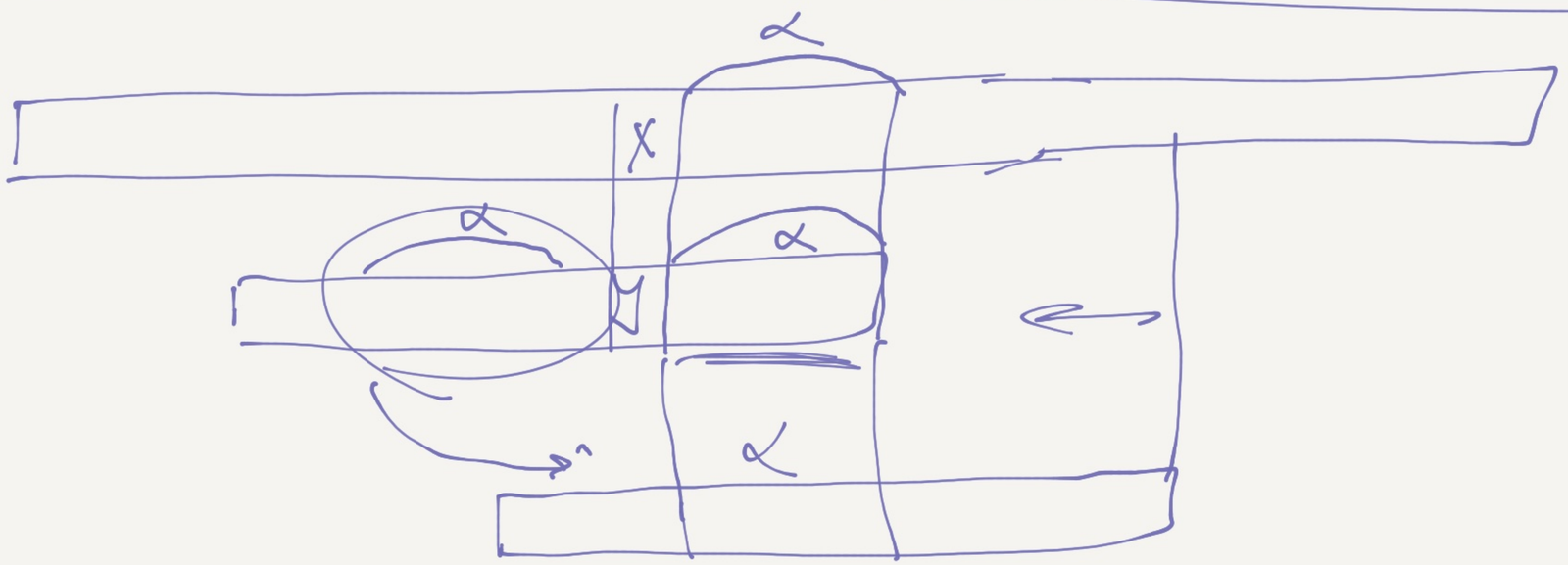
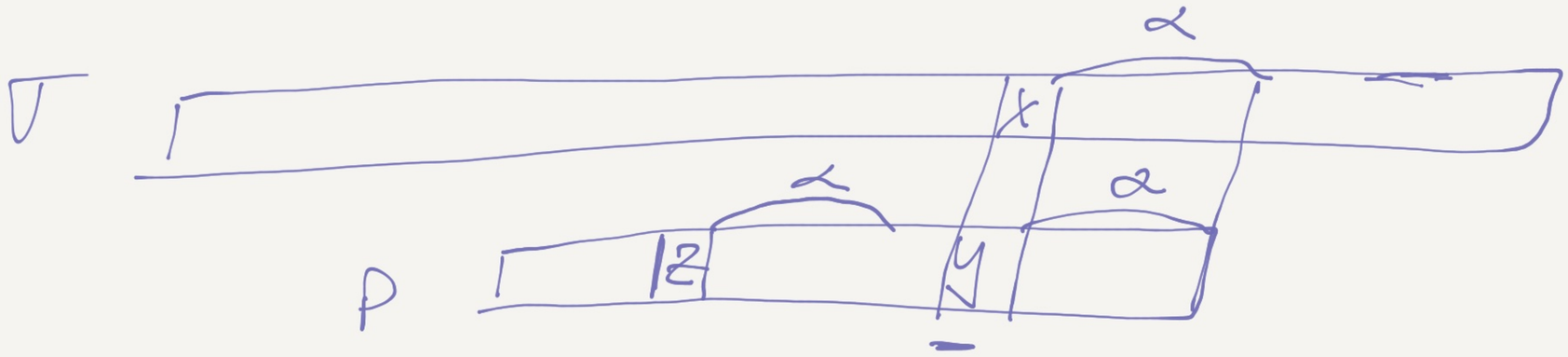
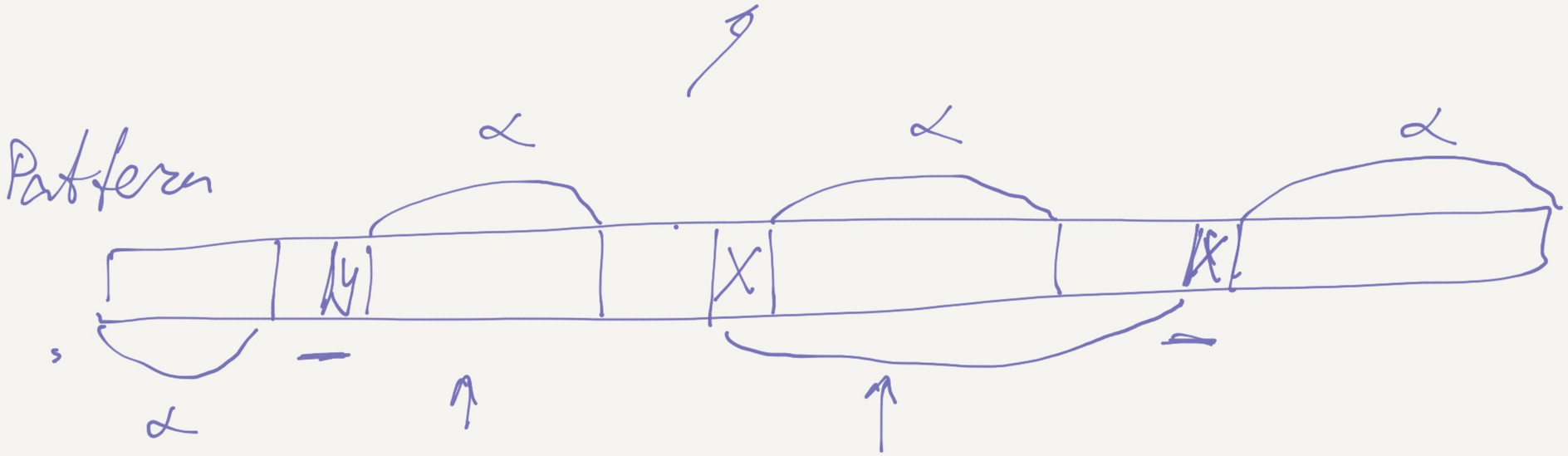

A
2
1
C
B
D
C
2
D
A
B





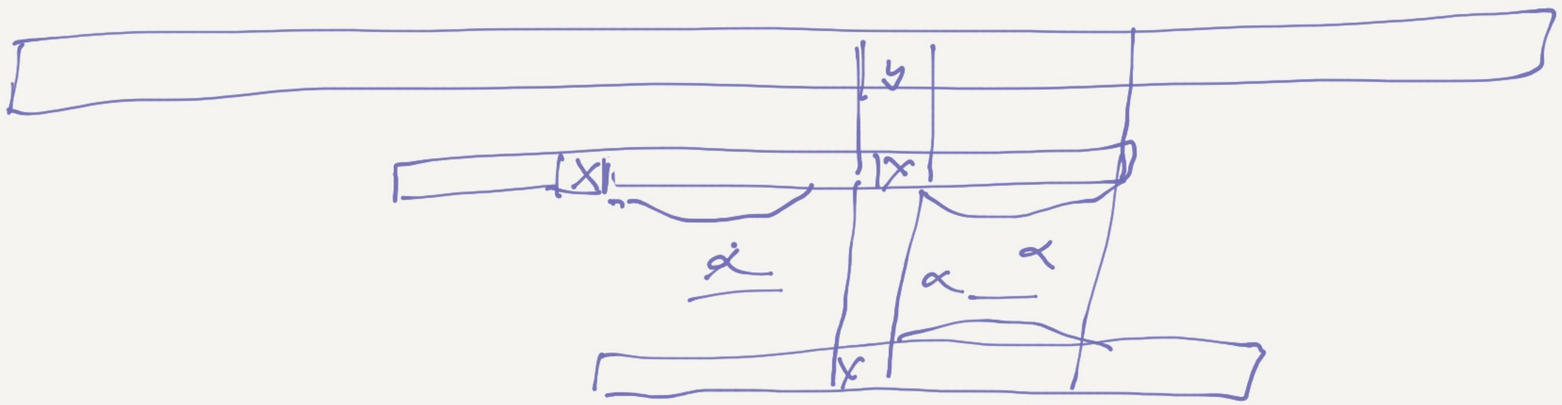


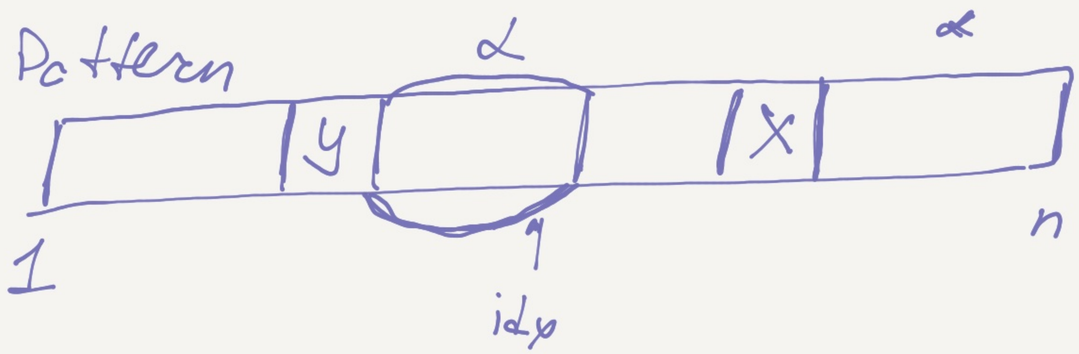


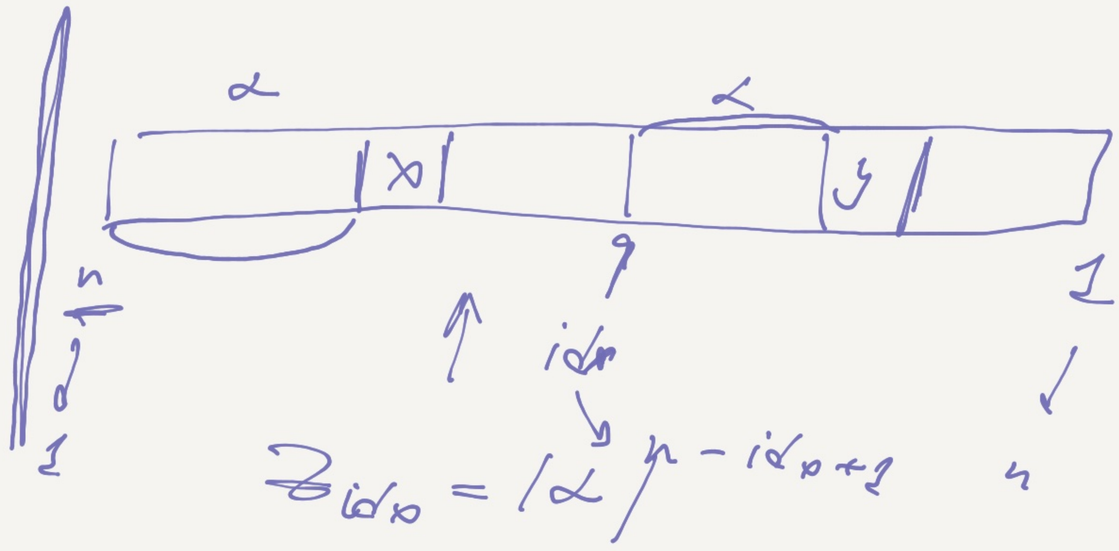


Сильное правило.

Слабое правило







$N \qquad N_{idx}$

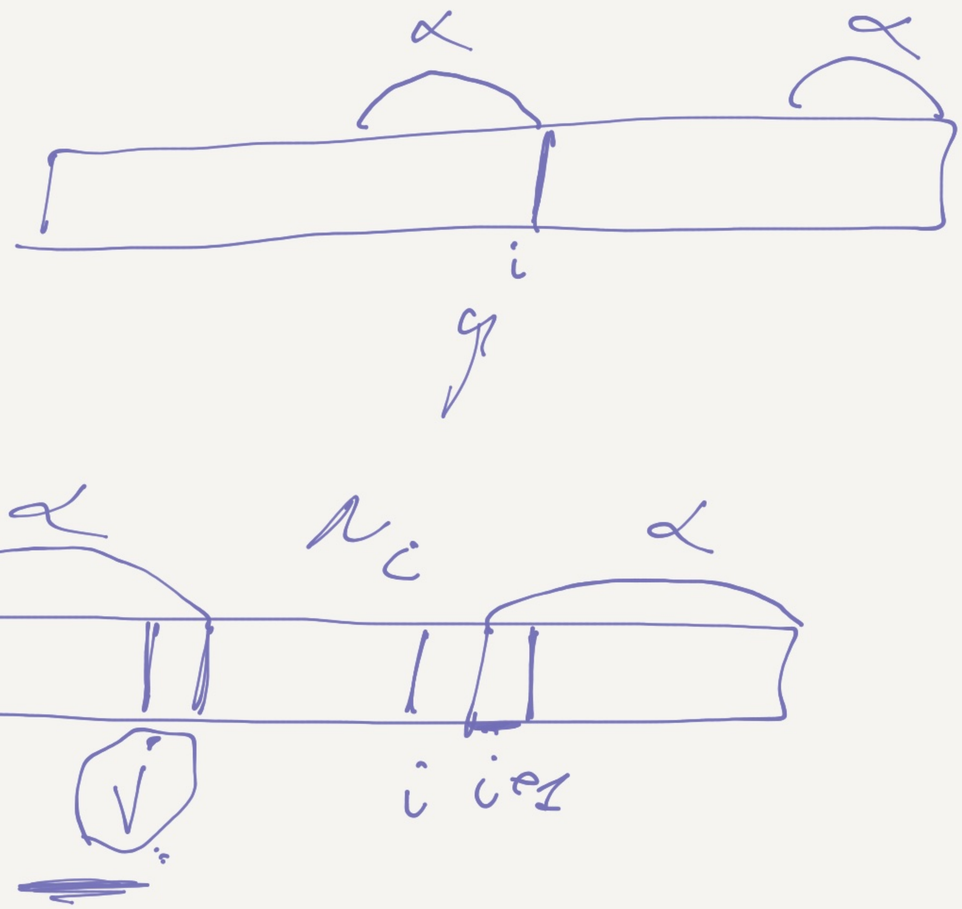
$P^R = reverse(P)$

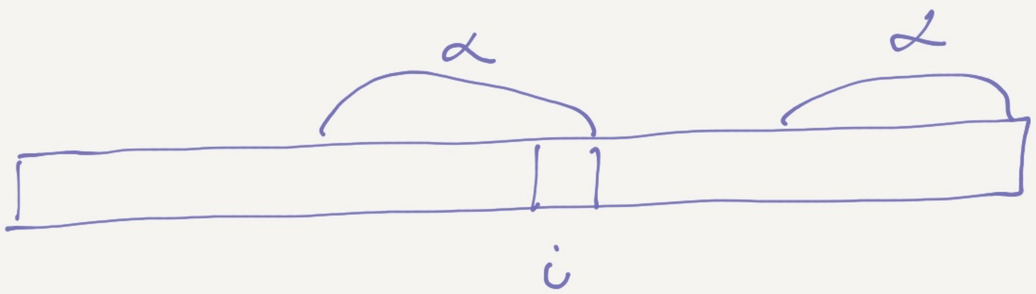
$Z(P^R)$

For $i = 1$ to n

$N_i = Z_{n-i+1}$

$\underline{N_j = |\alpha|}$

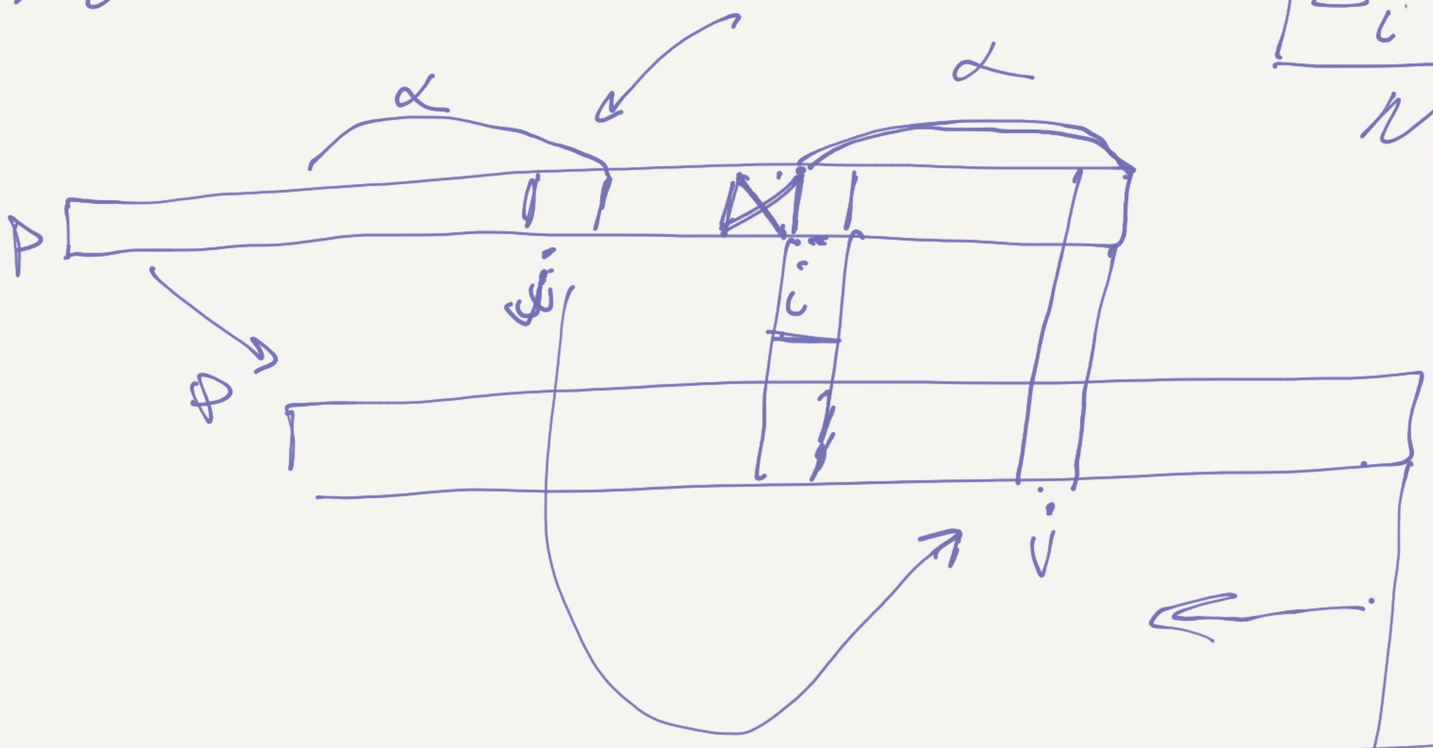




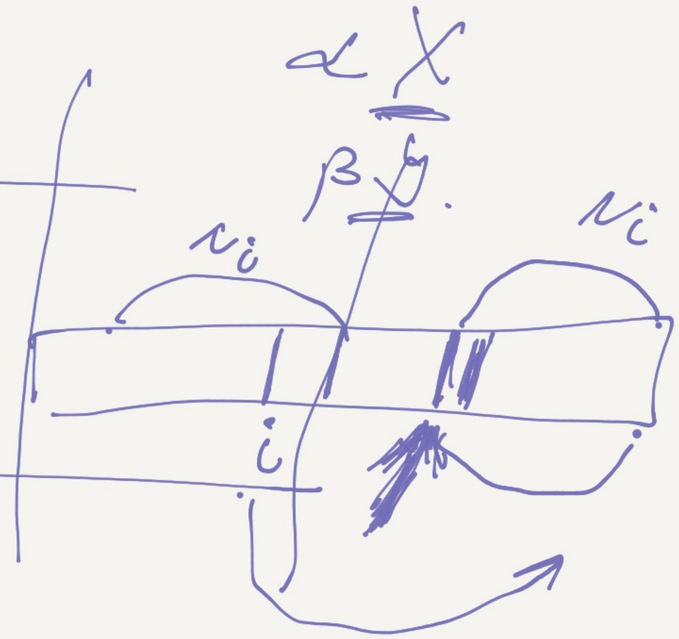
$N_0 = |\alpha|$

$\boxed{\angle_i' = \nu^i}$

$N_j = n - i + \Sigma_i = |\alpha|$.



	c	a	b	d	a	b	d	a	b
L_i'	0	0	0	0	0	0	0	3	0
N_i	0	0	2	0	0	0	0	0	0



	b	a	d	b	a	d	b	a	c
Z_i	-	0	0	5	0	0	2	0	0

for i = 1 to n-1:

$j = n - N_i + 1$

$L_j' = i$

$g - 0 + 1 = 10$

$i = 3$: $g - 2 + 1 = 8$

$L_8' = 3$

	c	a	b	d	a	b	g	a	b	d	a	b
N_j	0	0	2	0	0	5	0	0	2	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
L_i								6			9	
idp	1	2	3	4	5	6	7	8	9	10	11	12

$j = 12 - 2+1 = 11$

$j = n - N_j + 1$

$n - 0 + 1 = n+1$

$N_g = 2$

cabdabgab

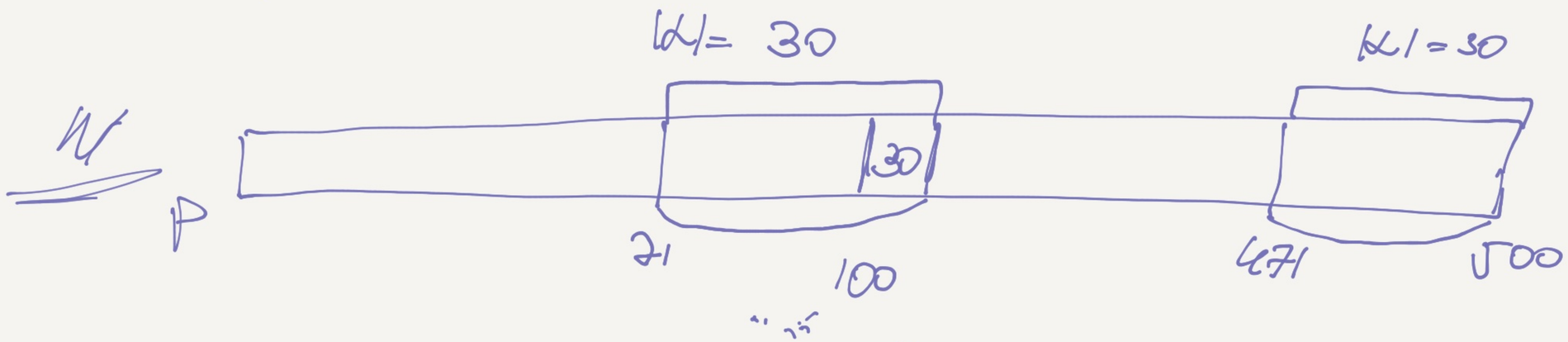
cabdabgabdab

	b	a	d	b	a	g	b	a	d	b	c
Z_i	-	0	0	2	0	0	5	0	0	2	0	0

$j = 12 - 5 + 1$

$j = 12 - 2 + 1 = 11$

Pattern



P: $W_{100} = 30$.

$P_{500} = P_{100}$

$P_{499} = P_{99}$

$P_{471} = P_{71}$

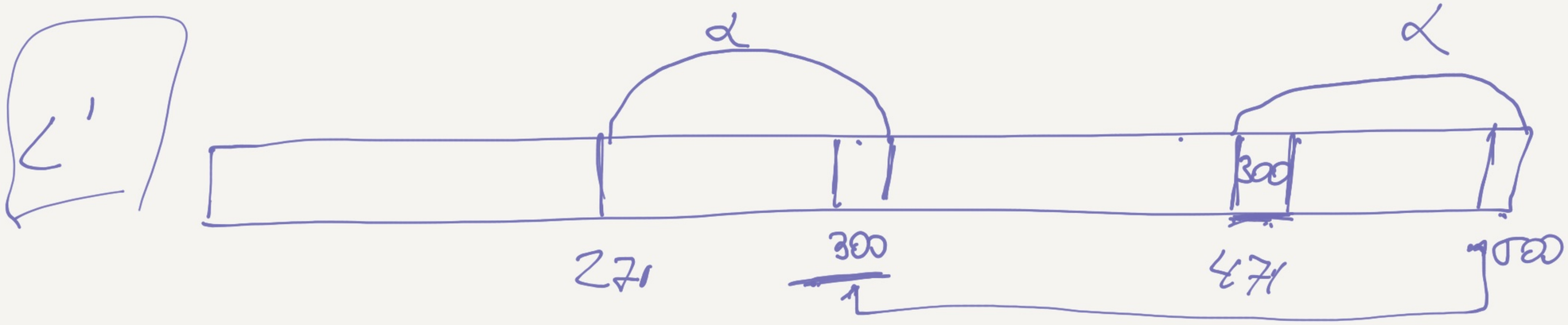
$P_{470} \neq P_{70}$.

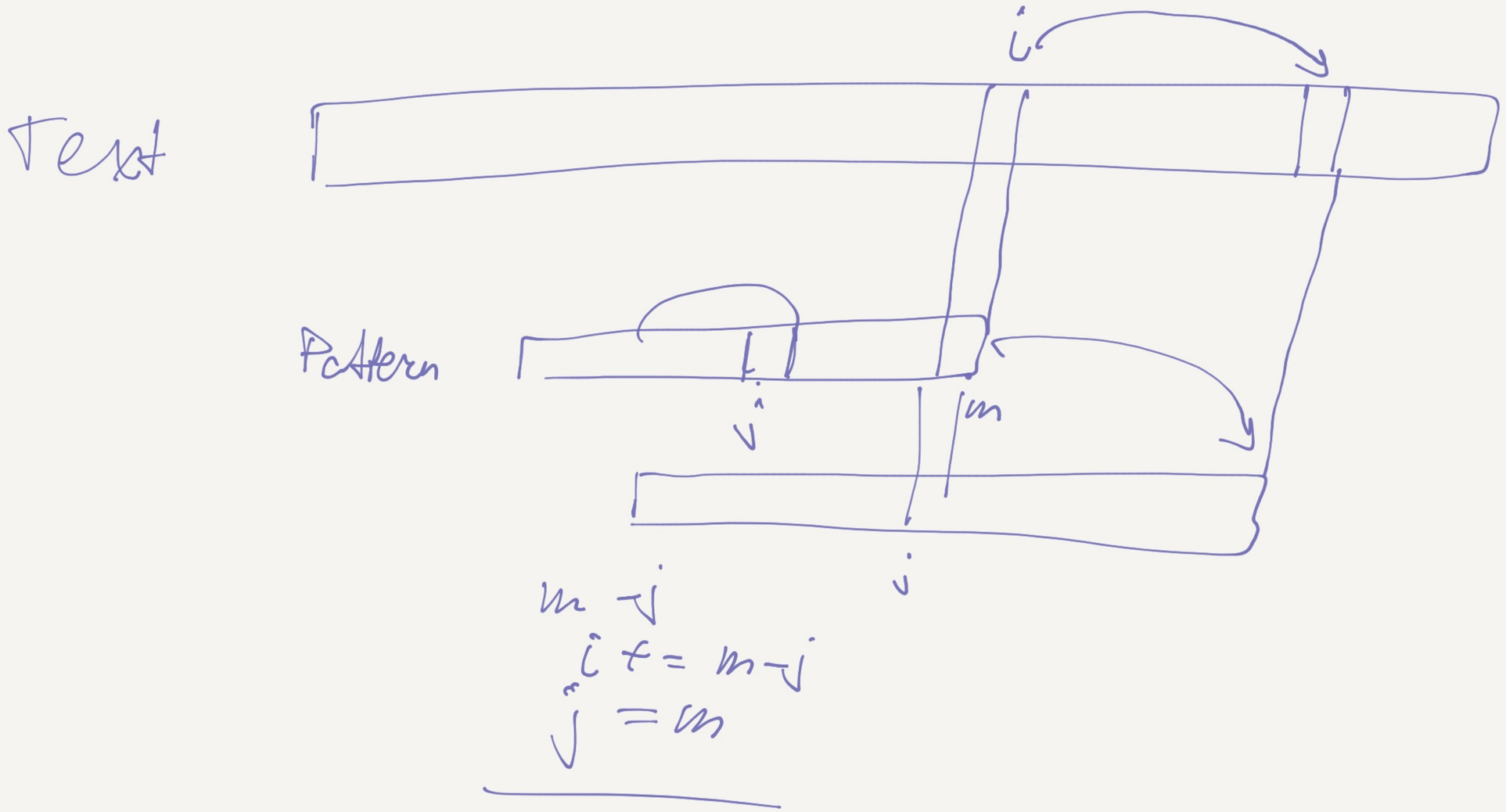
$P_{500} = P_{300}$

$P_{499} = P_{299}$

$P_{471} = P_{271}$

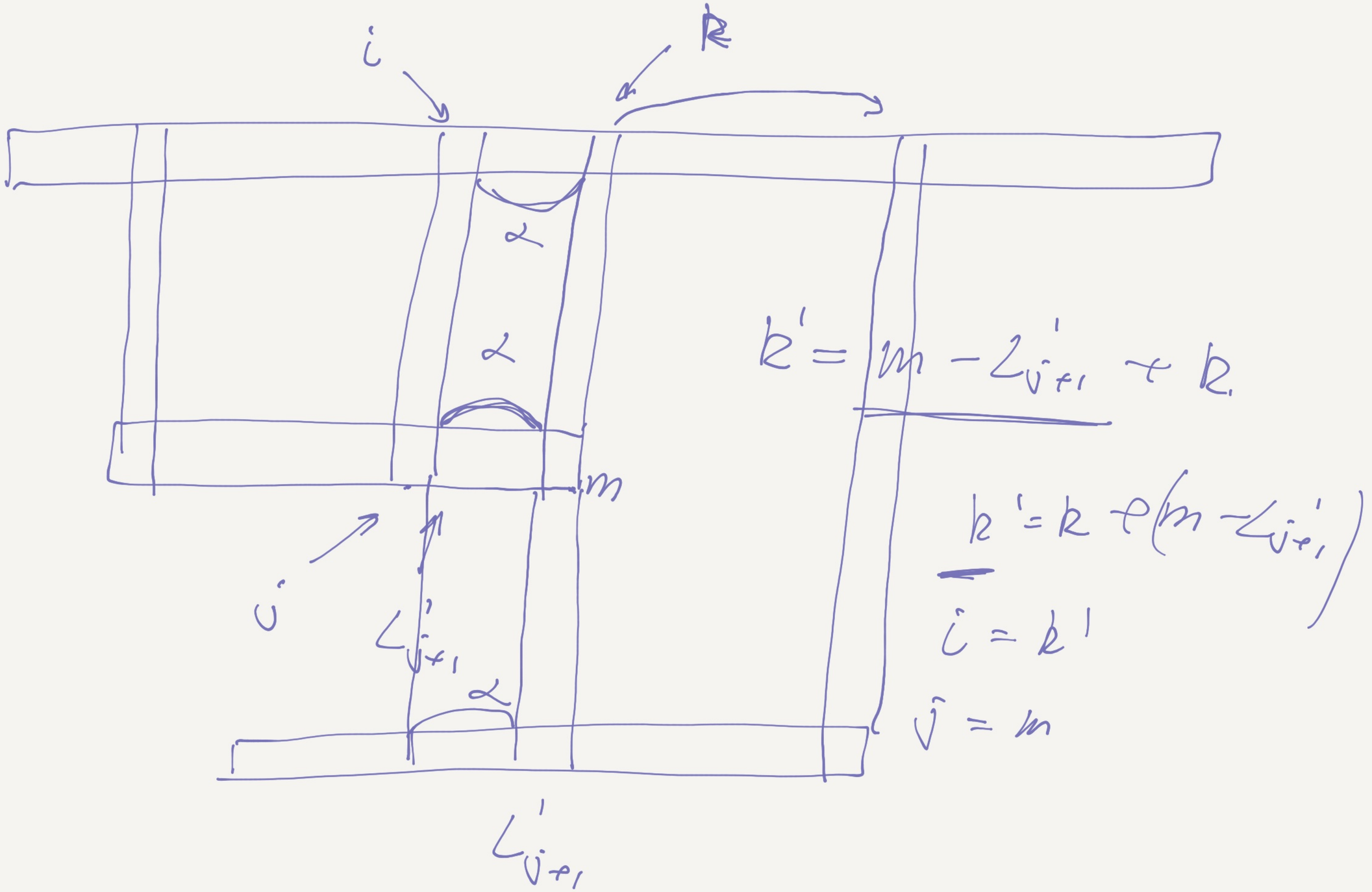
$P_{470} \neq P_{270}$.

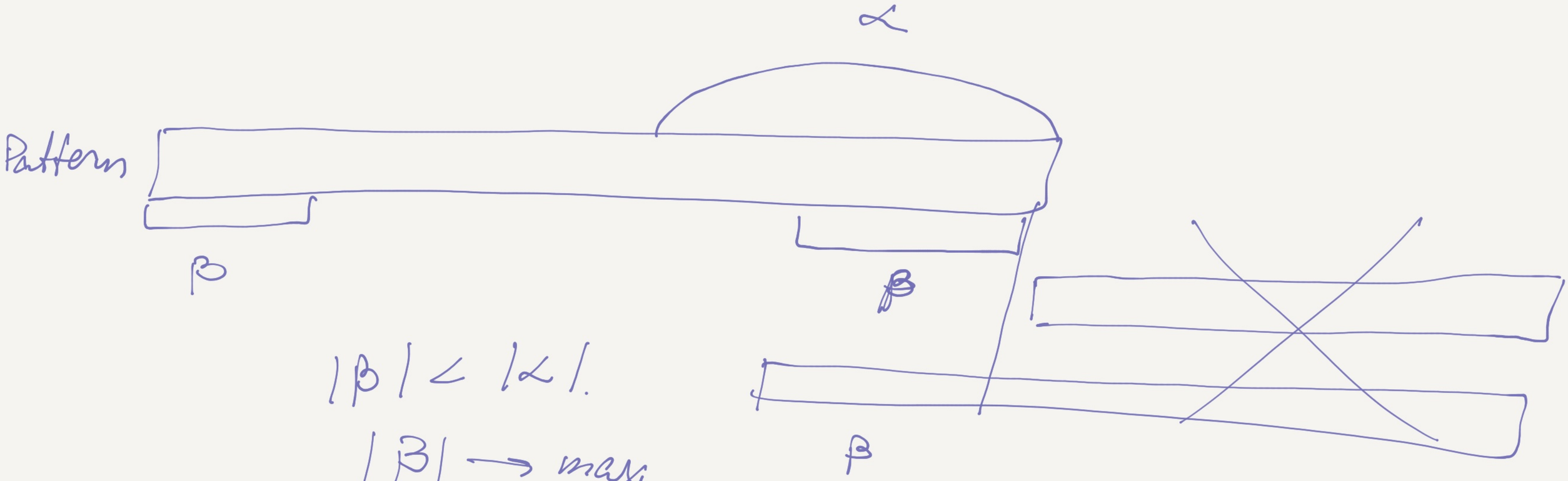




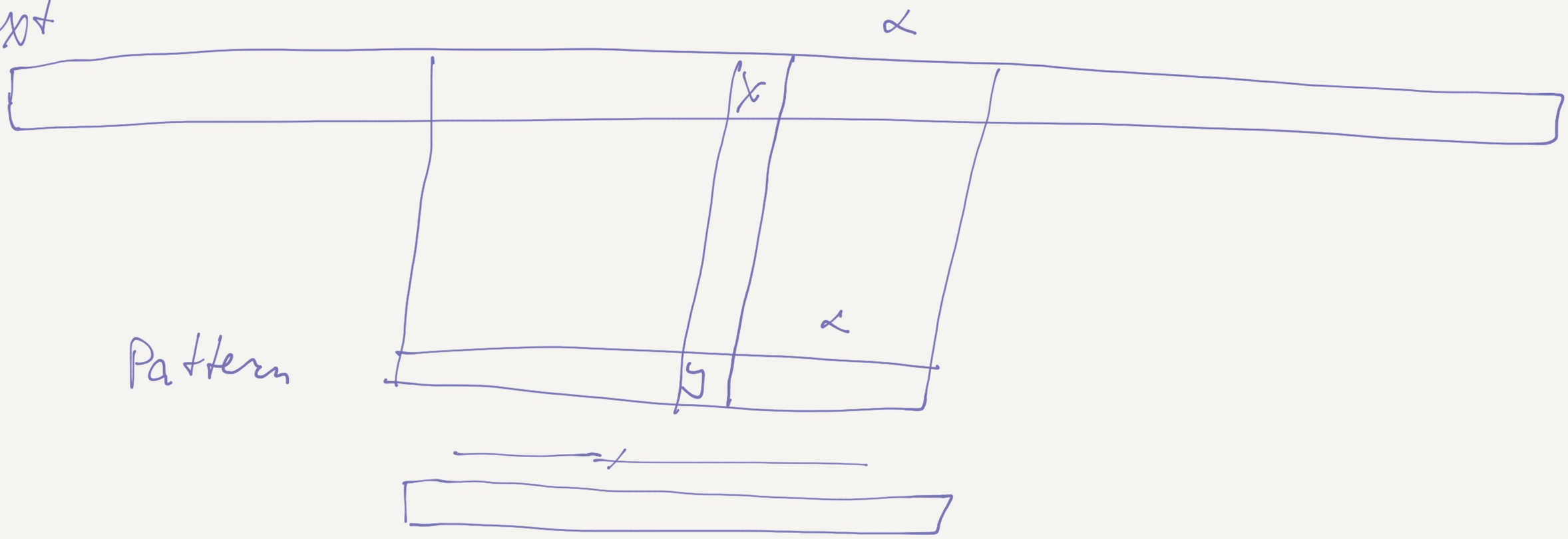
if $= m - j$

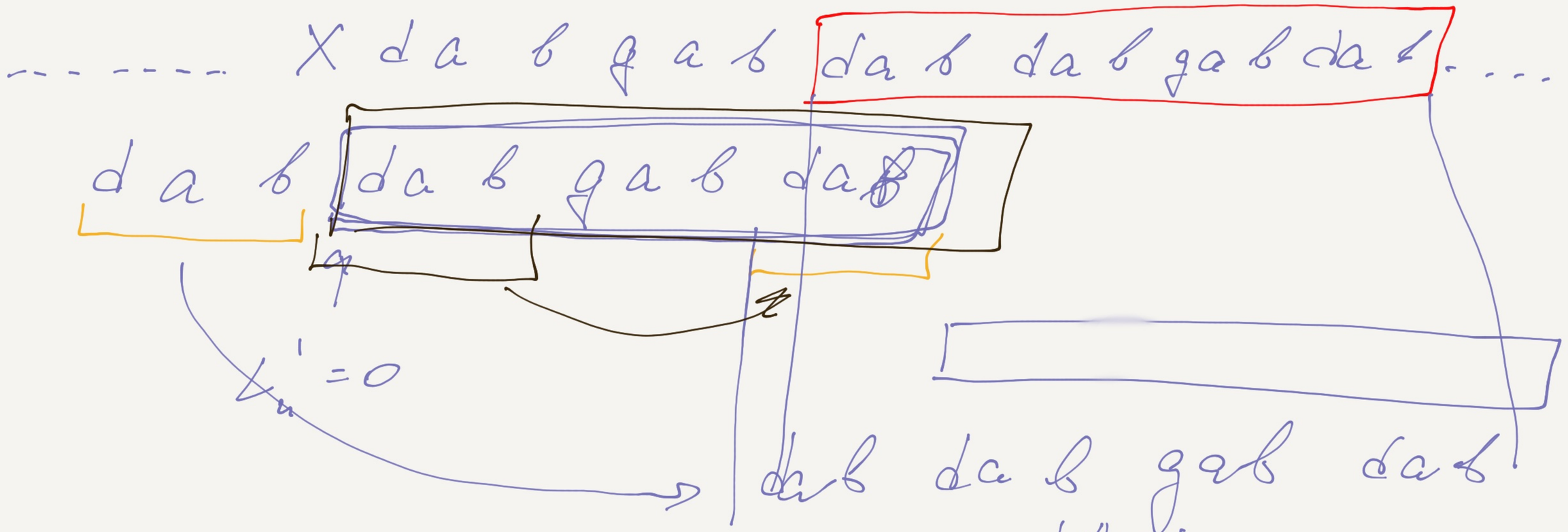
$j = m$


i
k
α
α
m
i'
j'+1
α
k' = m − l'j+1 + k
k' = k + e(m − l'j+1)
i = k'
j = m
l'j+1



Text





for $i = n$ to 1:

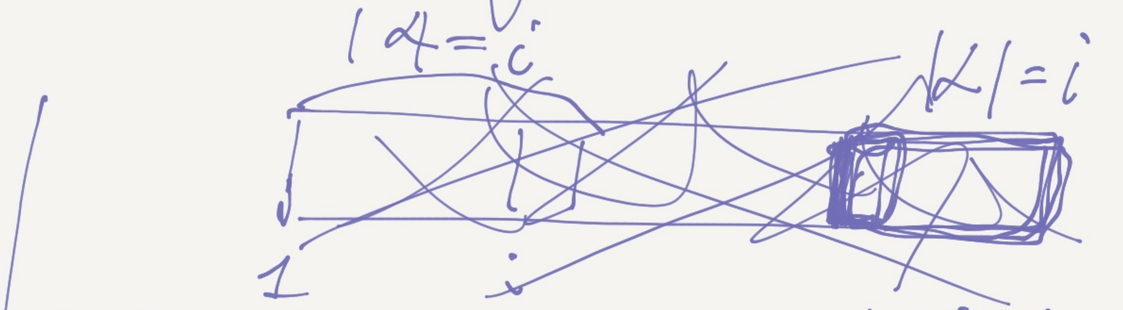
$j = n - i + 1$.

IF $N_j == j$:

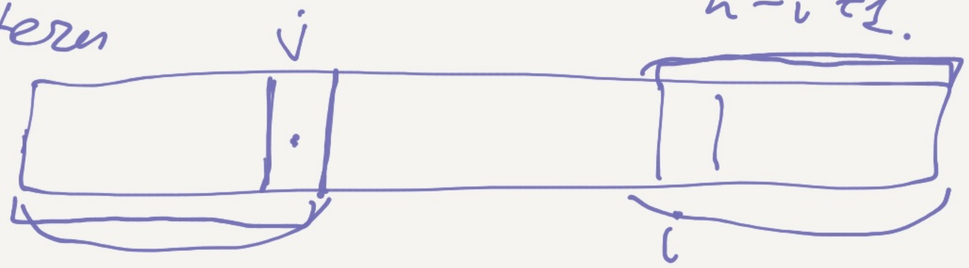
$l'_i = j$

else

$l'_i = l'_{i+1}$



Pattern



$\alpha_j = j$

	a	b	a	b	c	a	b	a	b
n_j	0	2	0	4	0	0	2	0	0
l_i'	4	4	4	4	4	4	2	2	0 → 0
idx	1	2	3	4	5	6	7	8	9

←

$j = n - i + 1$

$n_j == j$

b c a b a b

l_i'

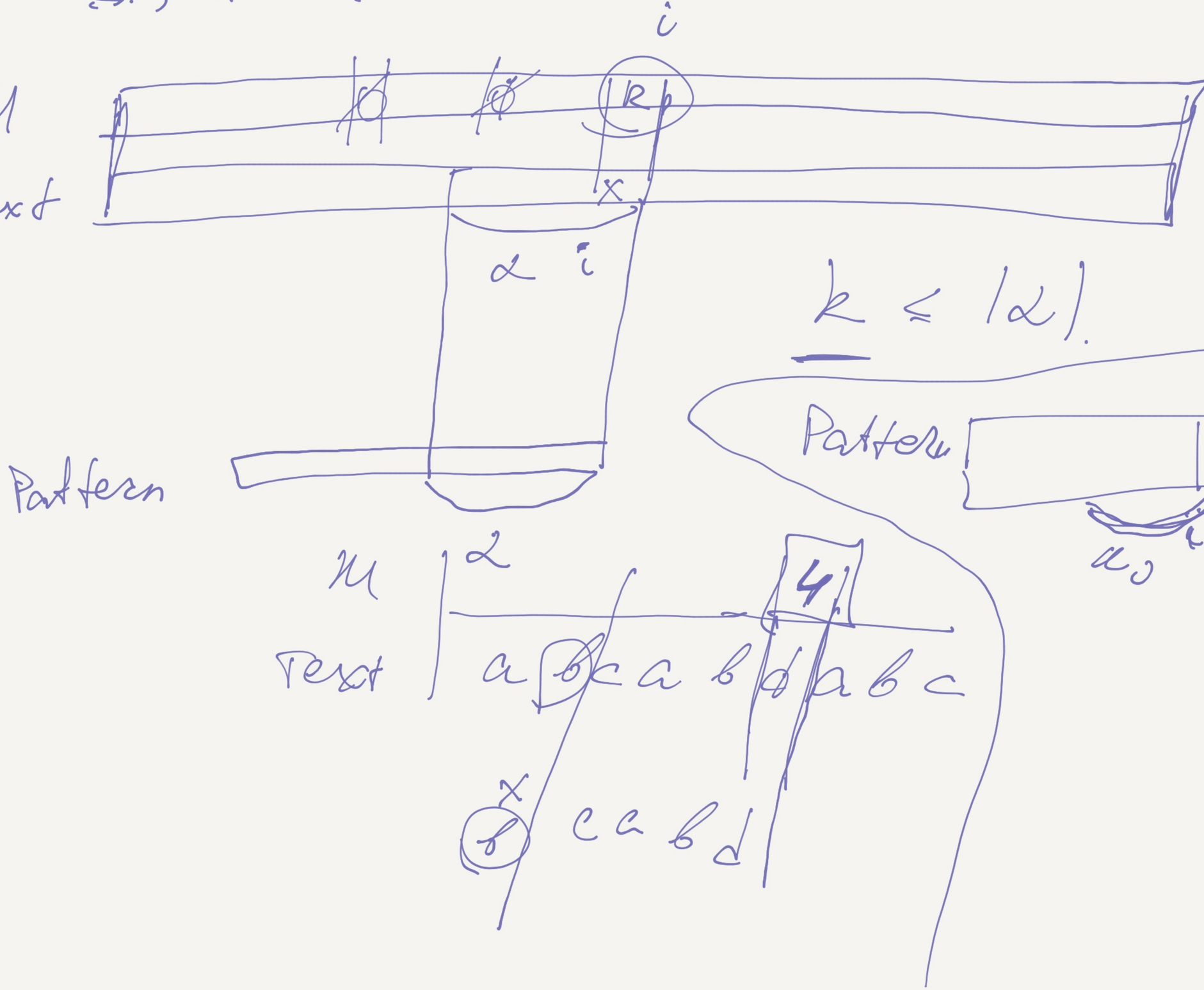
l_2'

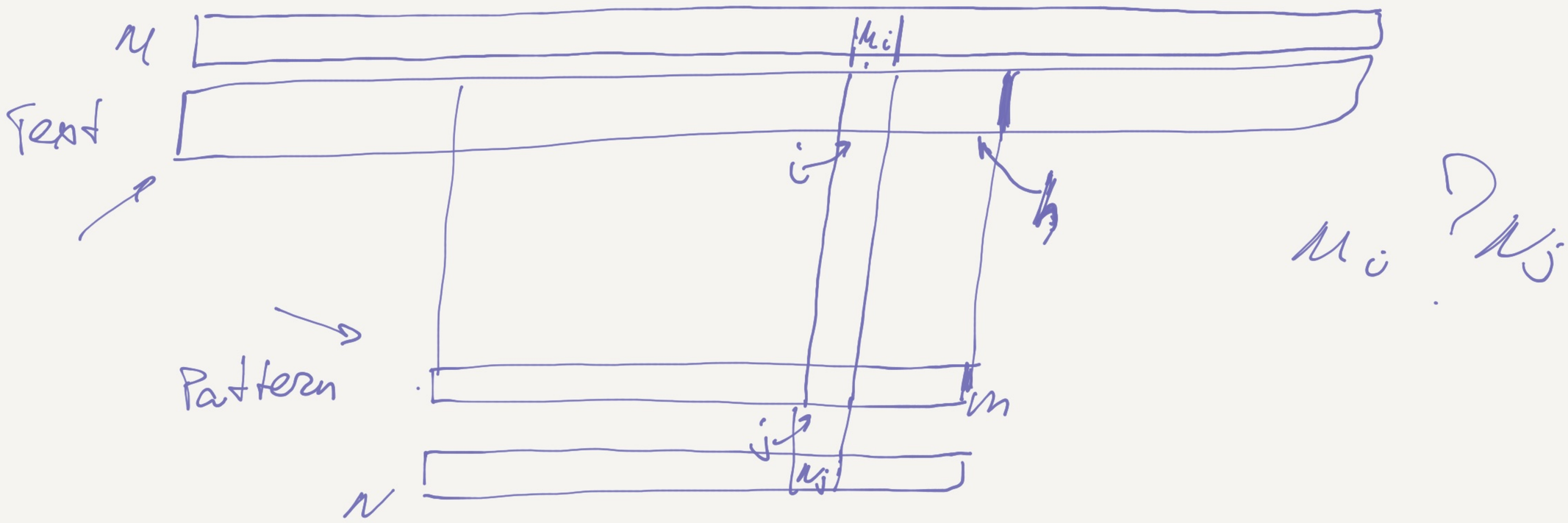
l_i' $n - l_2'$

Продолжение в 13:03 :=)

Апостолико – Джанкарло

Гасфилд., гл. 3.





M_i ? M_j

1) M_i — ?

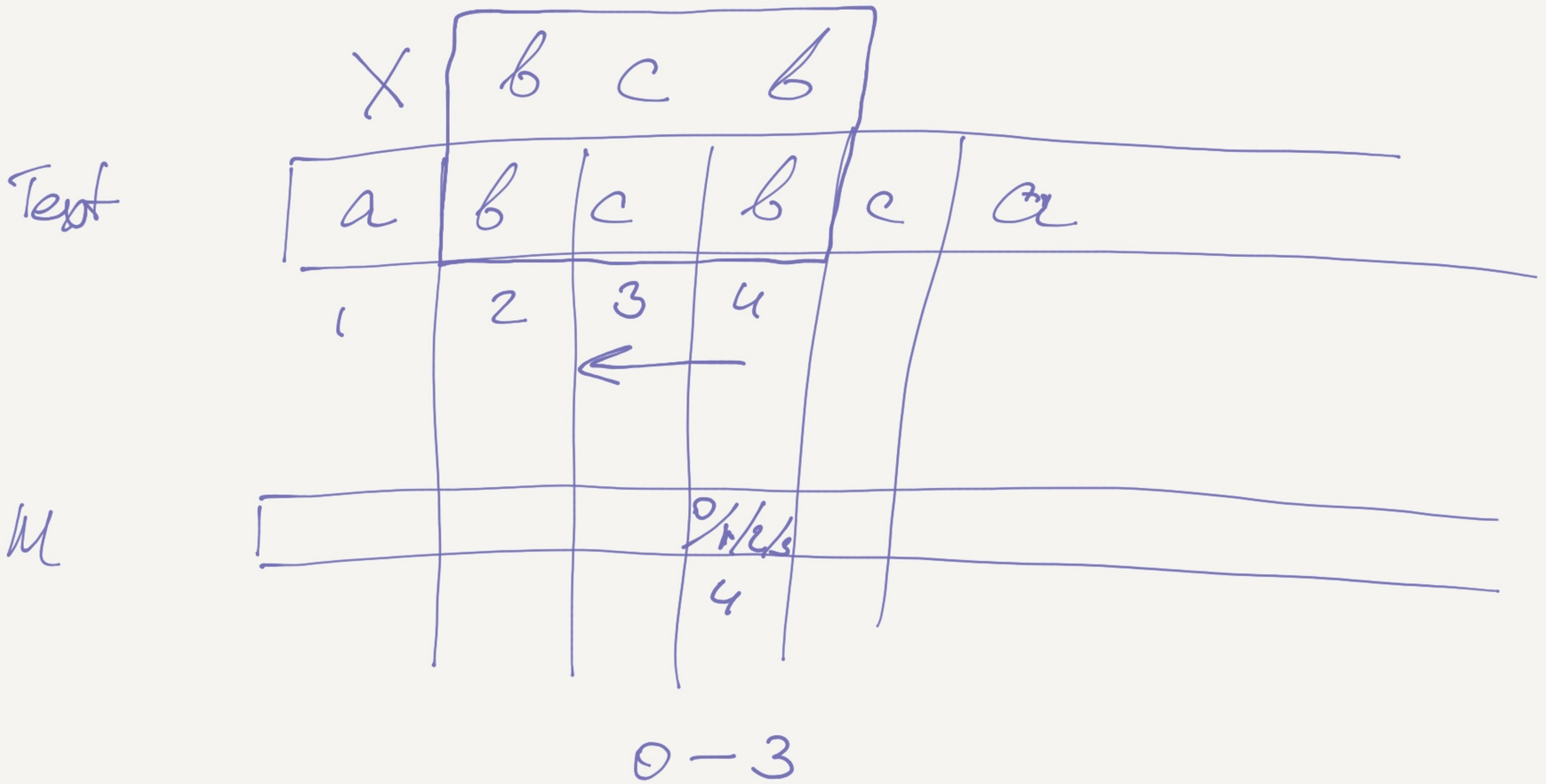
$T_i == P_j$ → — — i
— — j

$M_i = M_j = 0$

$j = 1$ → вхождение с i-ого символа

$T_j \neq P_j$.

$M_h = M_3$



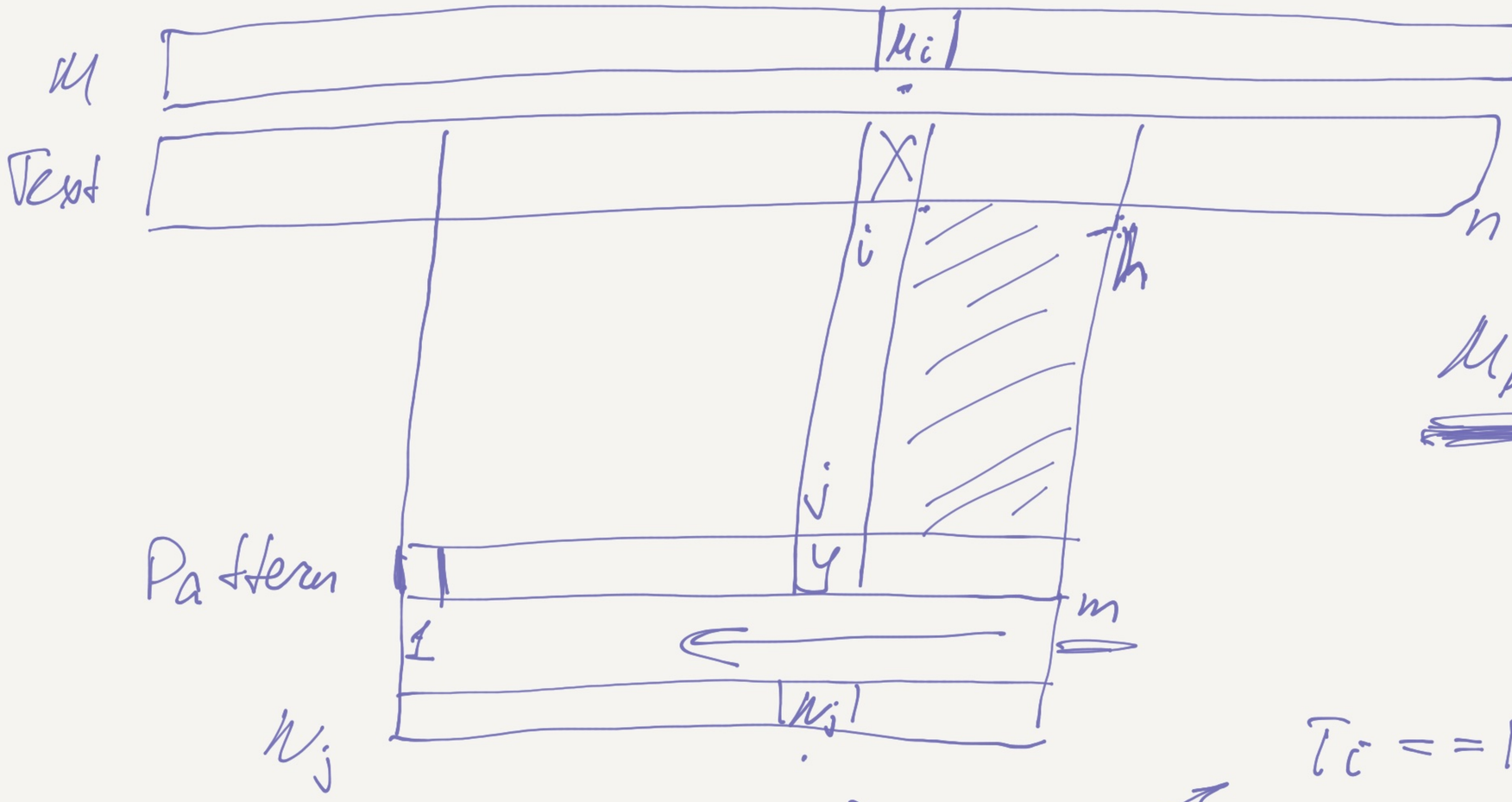
0 – 3

M_0 :

P = x b c b

a b c b

x b c b



$\mu_1 = m$ $\mu_{100} = 20$.

1) μ_i – не определено
$\mu_i = N_j = ?$

$T_i \; ? \; P_j$

$T_i = = P_j$ — i

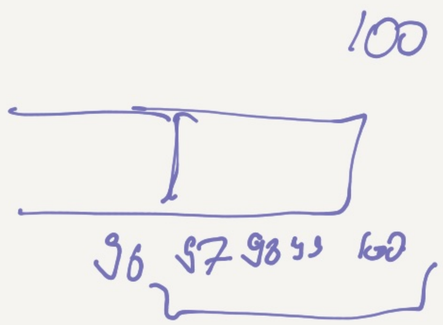
$j = 1$

$j > 1$ — j

$T_i \neq P_j$

Входождение.

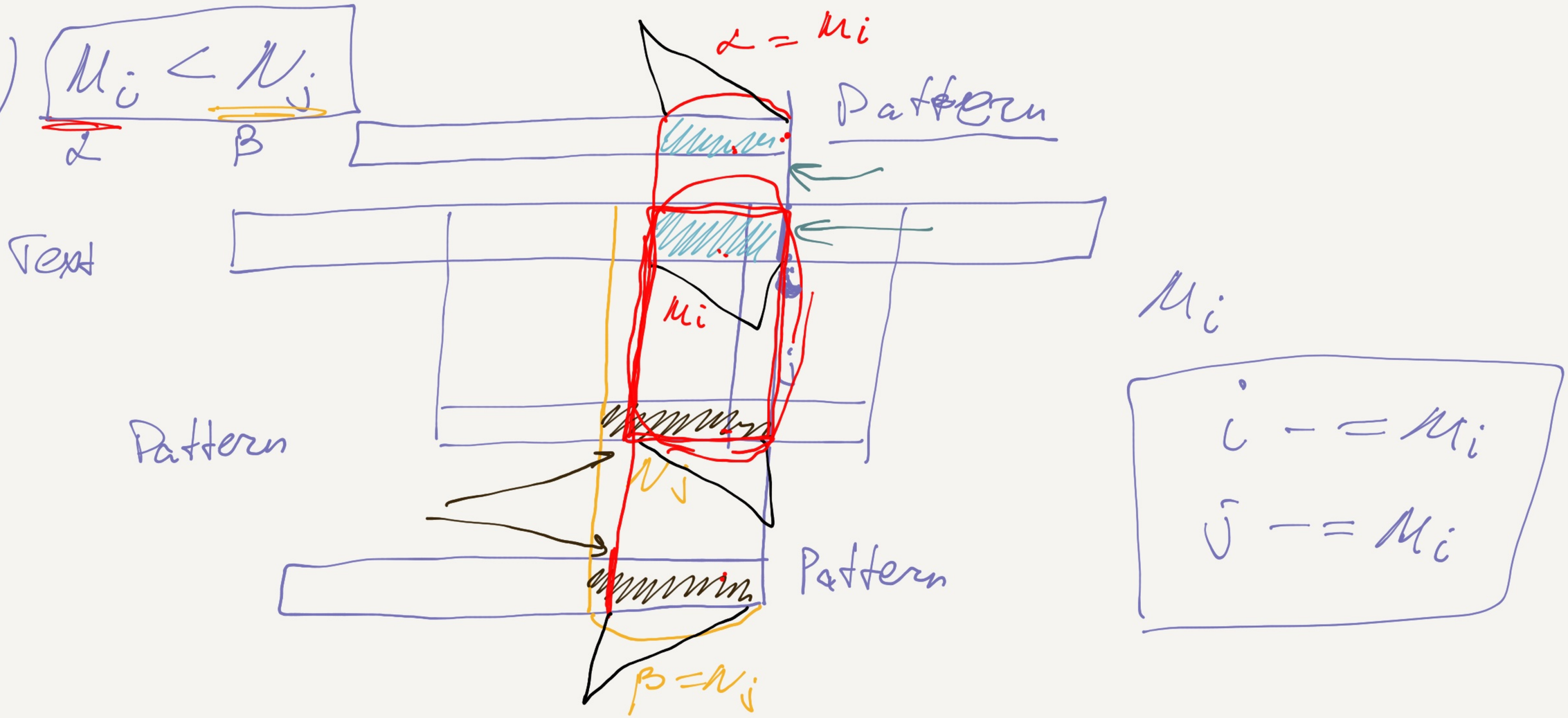
$\mu_h = h - i$



$\mu_{100} = 100 - 96 = 4$.

2) $M_i < N_j$

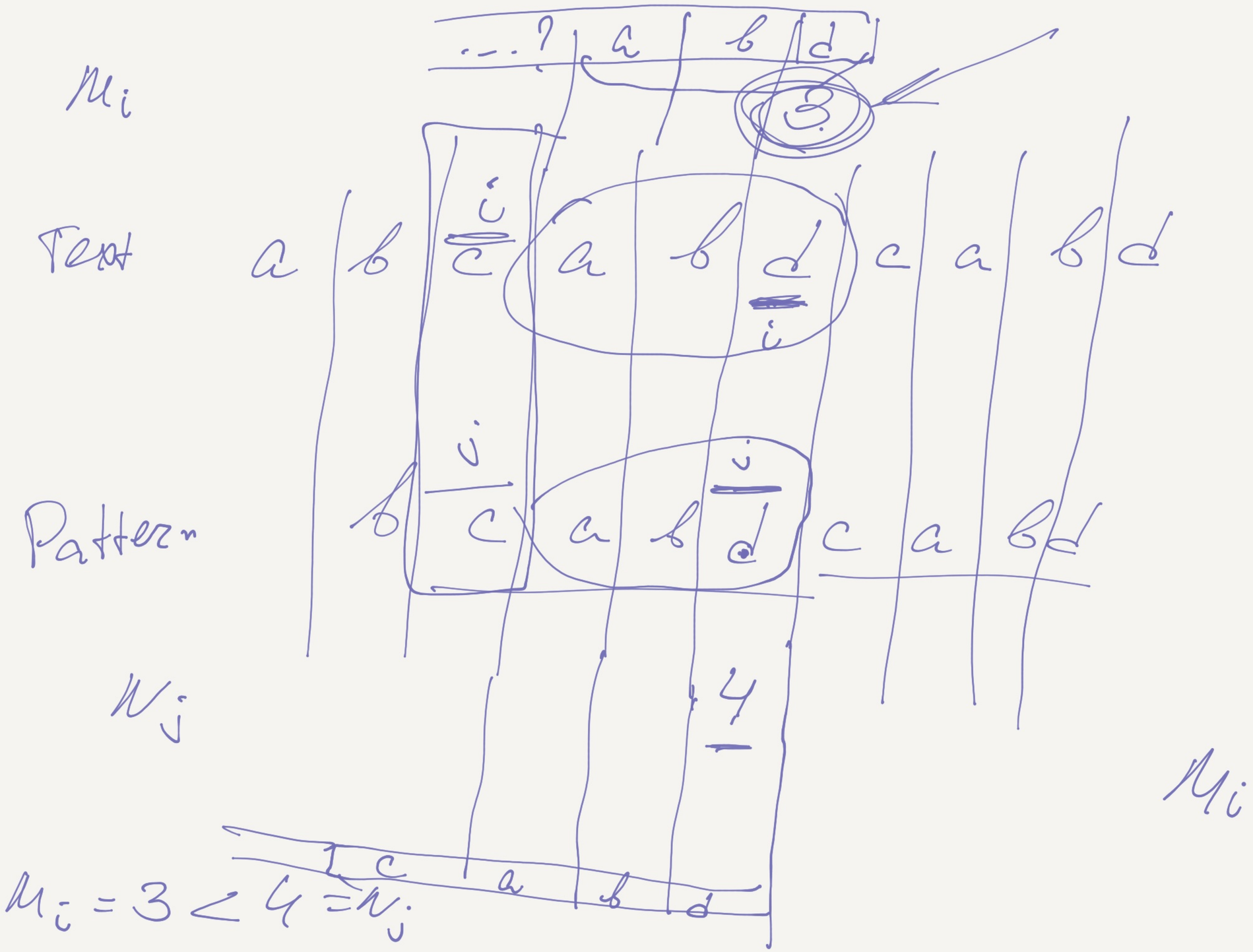
α $\quad$ β



M_i

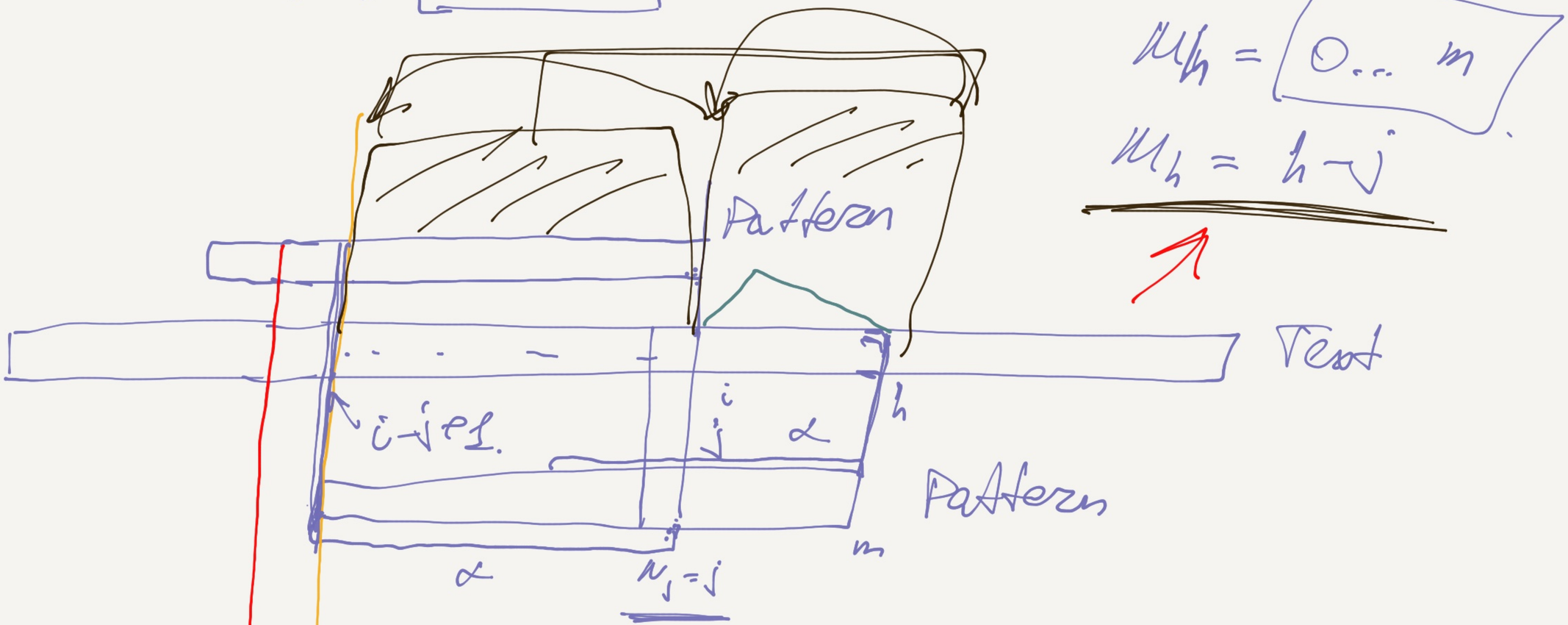
$i \quad -= M_i$

$j \quad -= M_i$



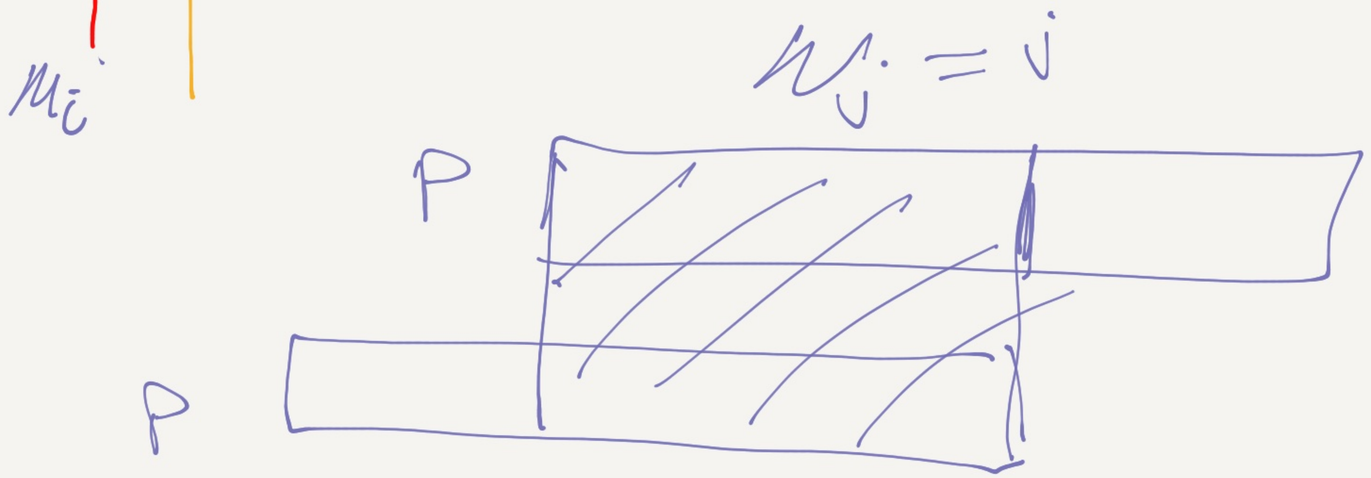
$\boxed{M_i < N_j}$

3) $u_i \geq u_j$, $u_j = j$

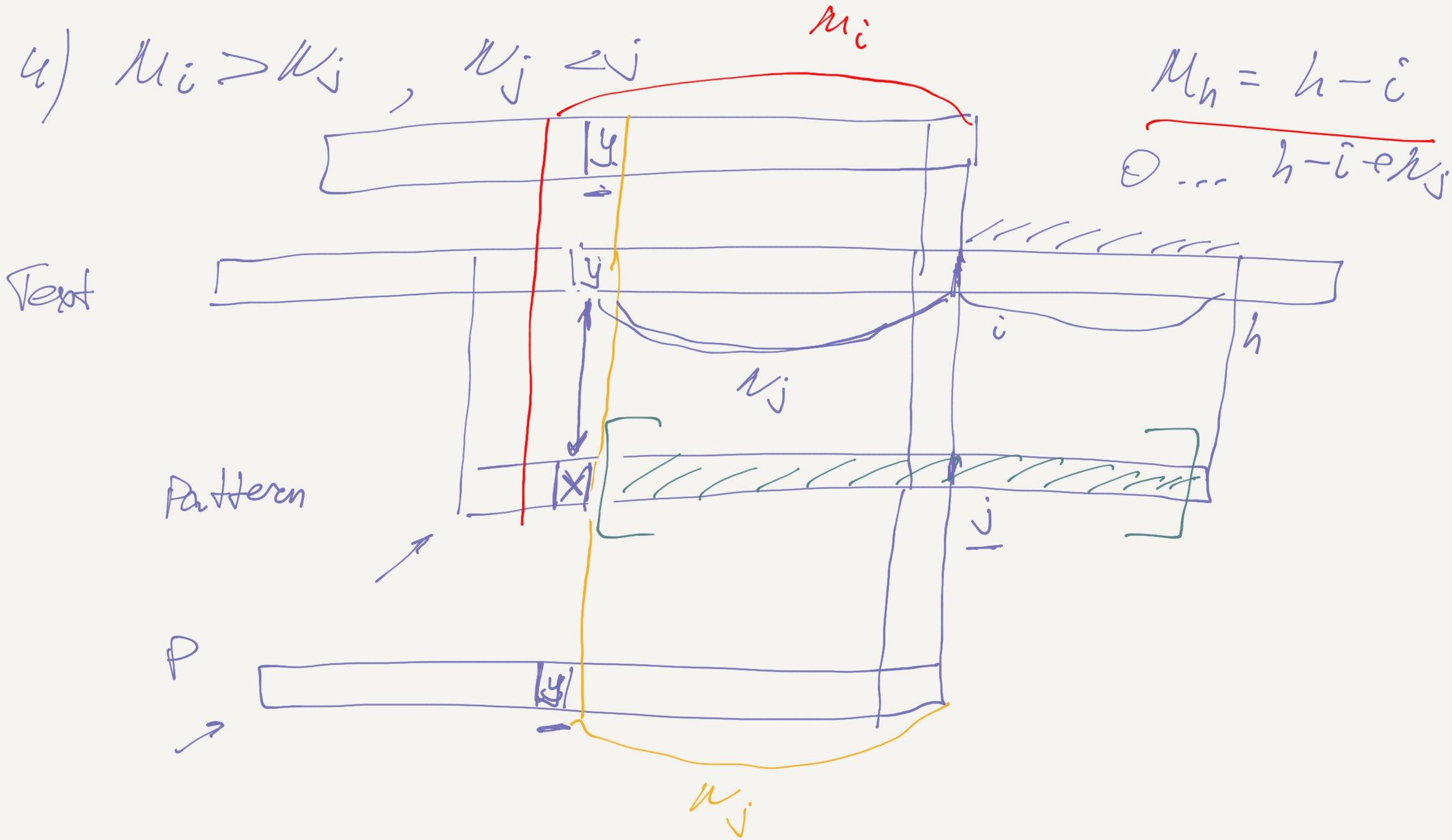


$u_h = 0 \ldots m$

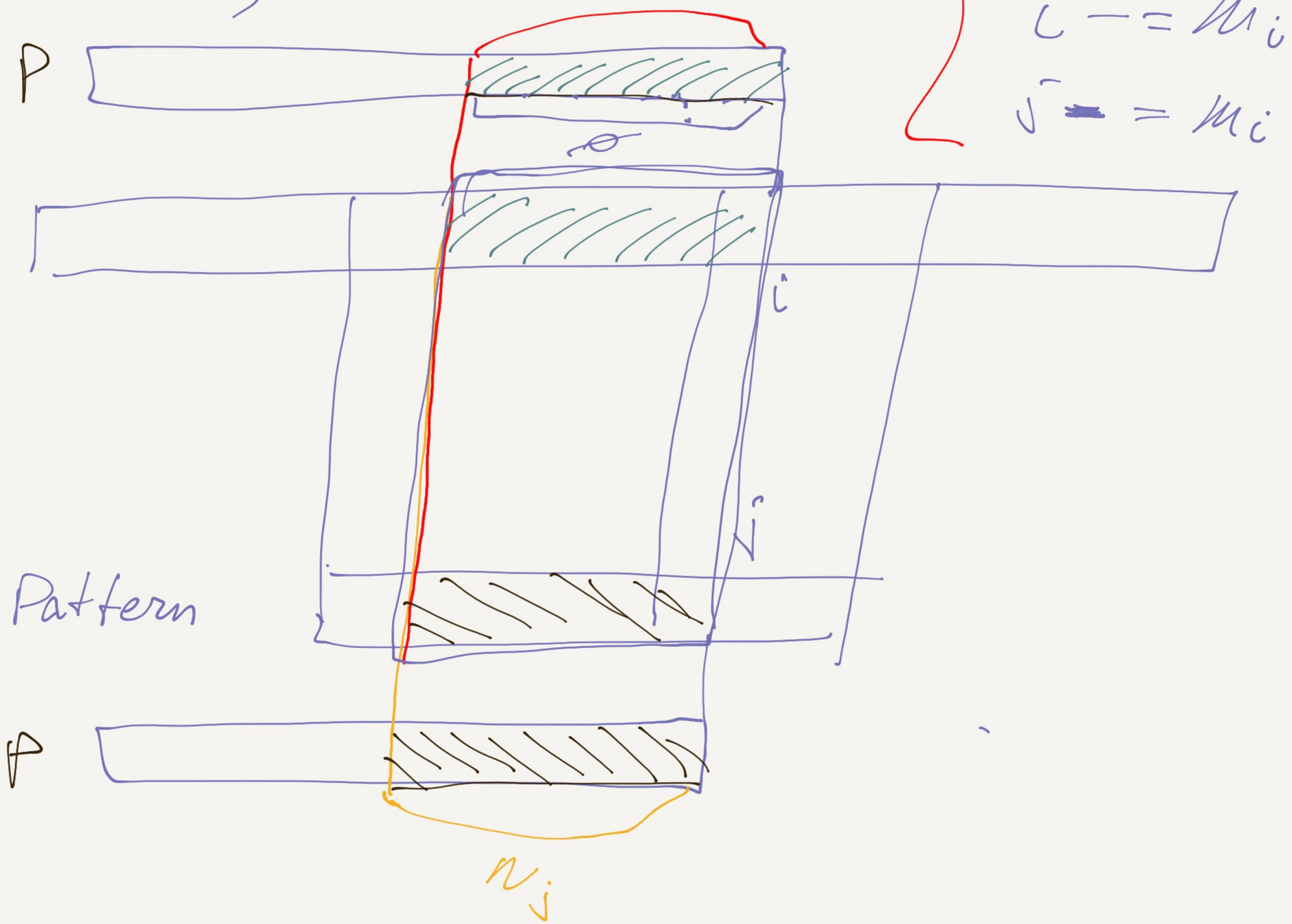
$u_h = h - j$



4) $\mu_i > \nu_j$, $\nu_j < v$



5) $m_i = n_j$, $0 < n_j < j$ m_i



*1) π_i - не определено $\| \pi_i = \pi_j = 0$

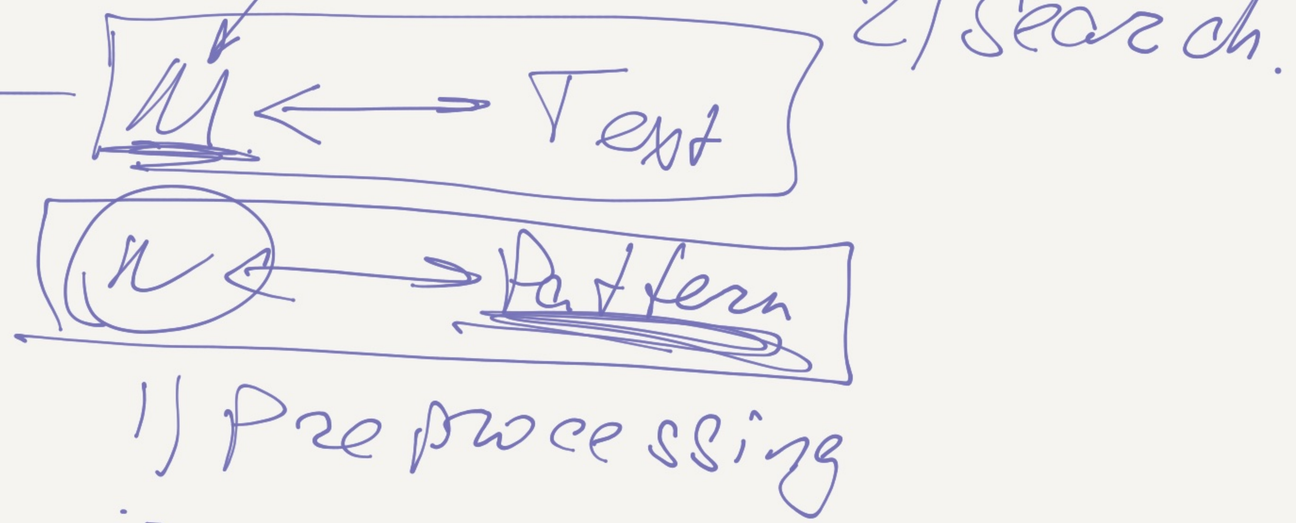
2) $\pi_i < \pi_j$ ——— $\pi_i \geq \pi_j$

*3) $\pi_i \geq \pi_j$, $\pi_j = j$ ——— $\pi_i \geq \pi_j$, $\pi_j \neq 0$.

*4) $\pi_i > \pi_j$, $\pi_j < j$

5) $\pi_i = \pi_j$, $0 < \pi_j < j$ → $\pi_i \geq \pi_j$, $0 < \pi_j < j$

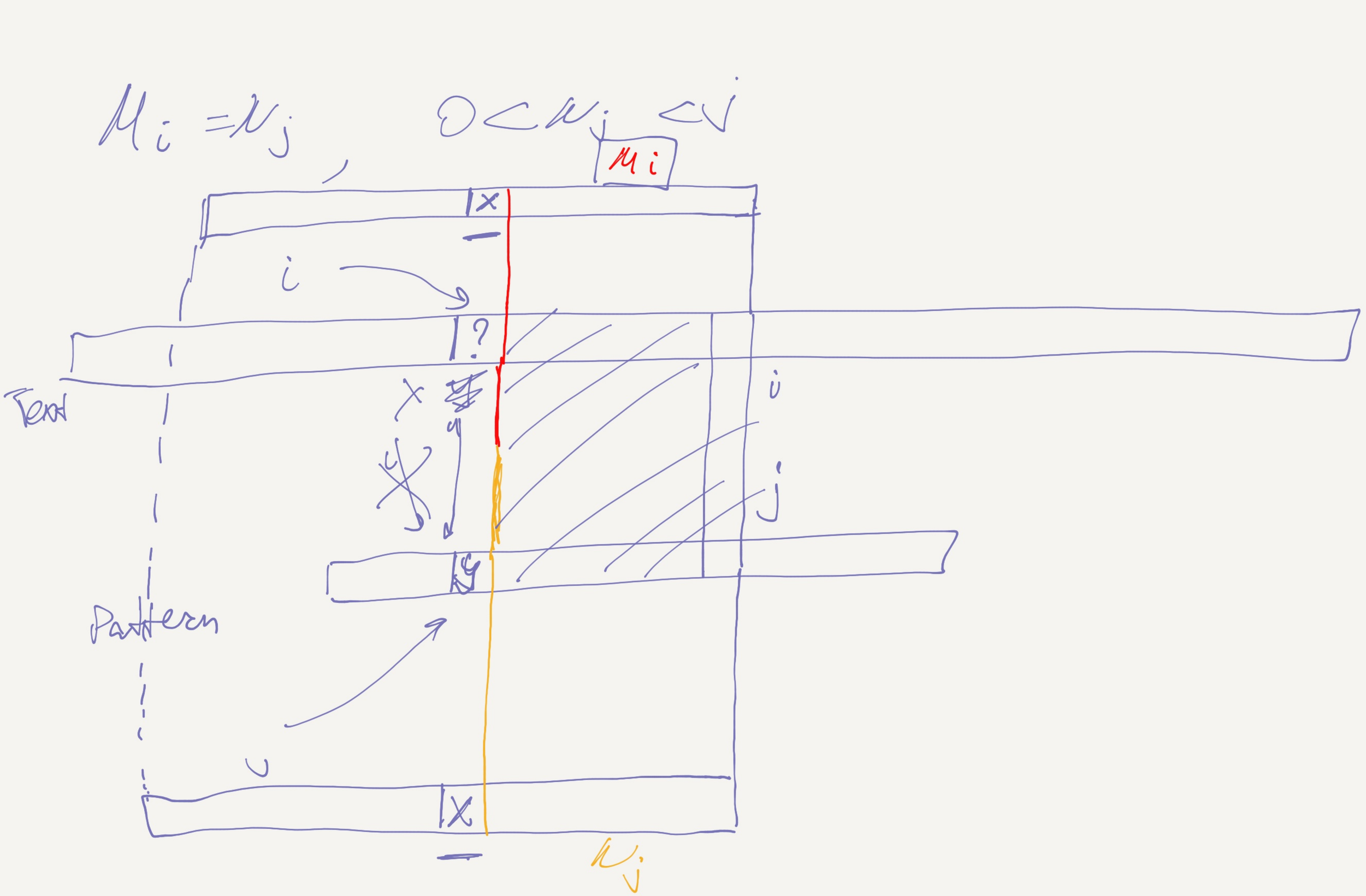
1, 3, 4 ——



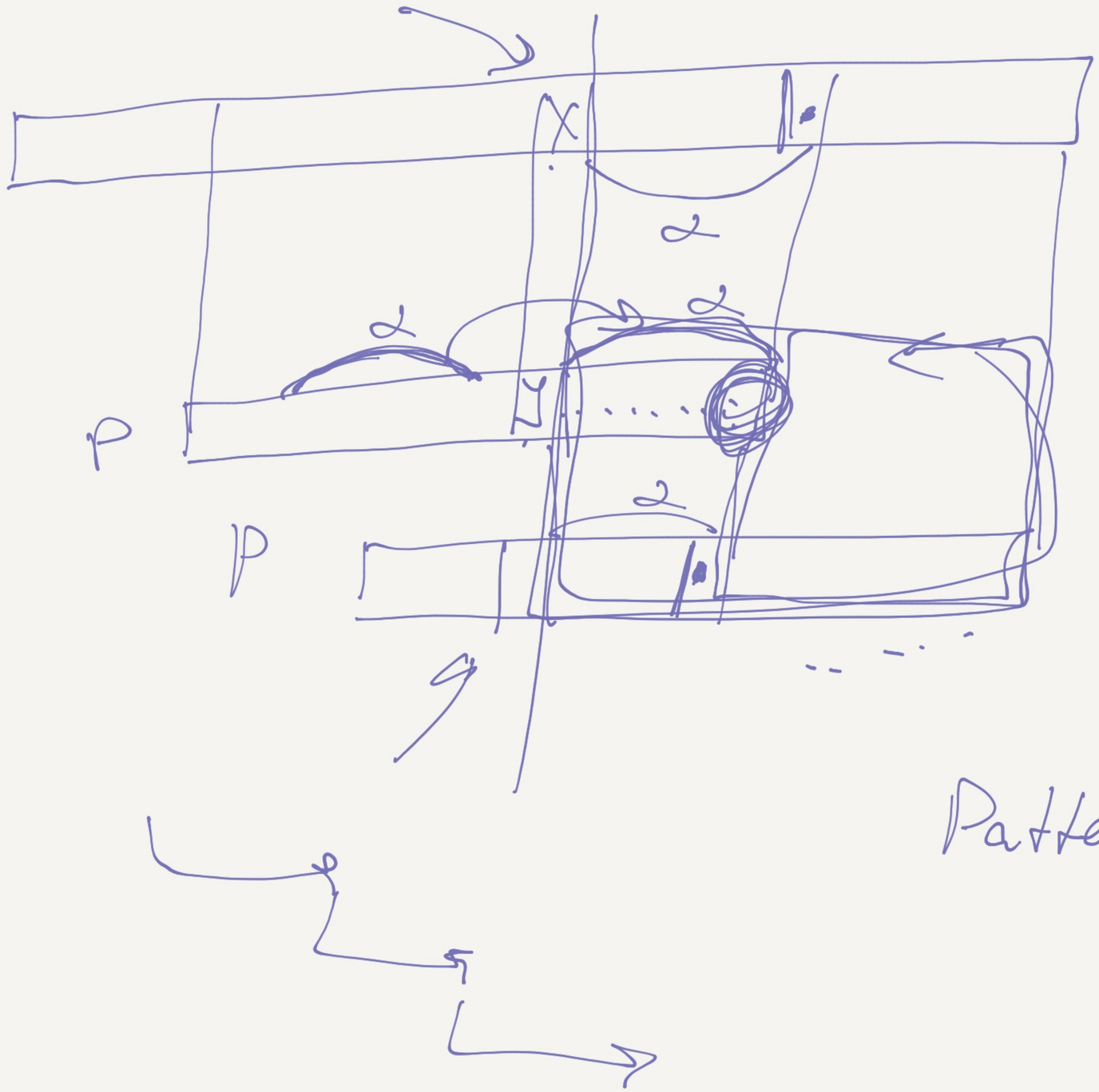
2/ Search.

1/ Preprocessing

$M_i = M_j$, $0 < M_j < V$



Text



Pattern $\Rightarrow \mathcal{Z}(P^R)$

$\downarrow$

$\omega(\delta)$

Ахо – Корасик

$O(n + m)$

|Text| → |Pattern|

$m = \sum_{i=1}^{z} m_i$

$O(m + z \cdot n)$

P_1 $|P_1| = m_1$

P_2 $|P_2| = m_2$

⋮ ⋮

P_z $|P_z| = m_z$

$O(n + m + k)$

|Text| $\sum_{i=1}^{z} |Pattern_i|$ число вхождений

$P_1 \to k_1$

$P_2 \to k_2$

- ~ -

$P_z \to k_z$

$\to k = \sum_{i=1}^{z} k_i$