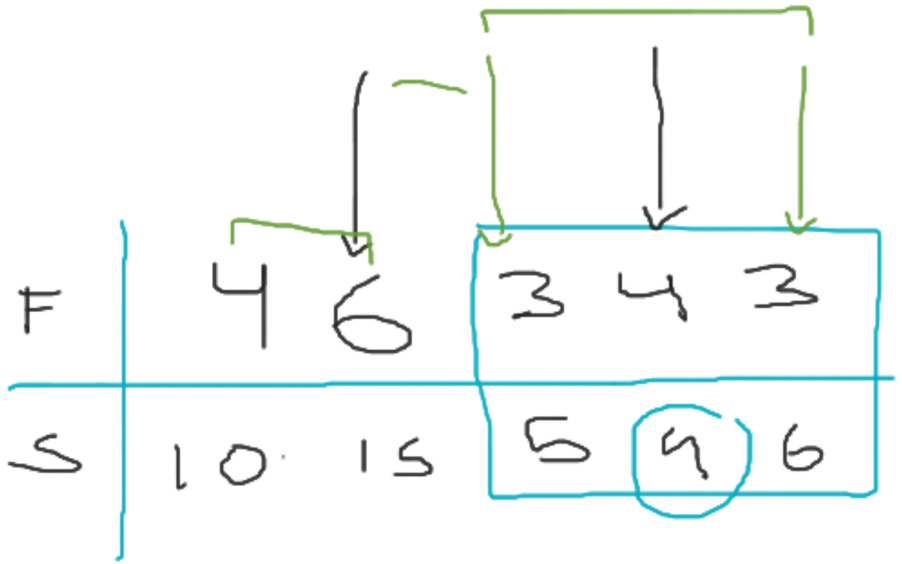
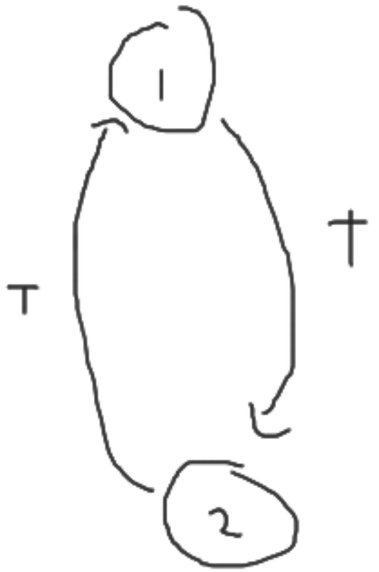
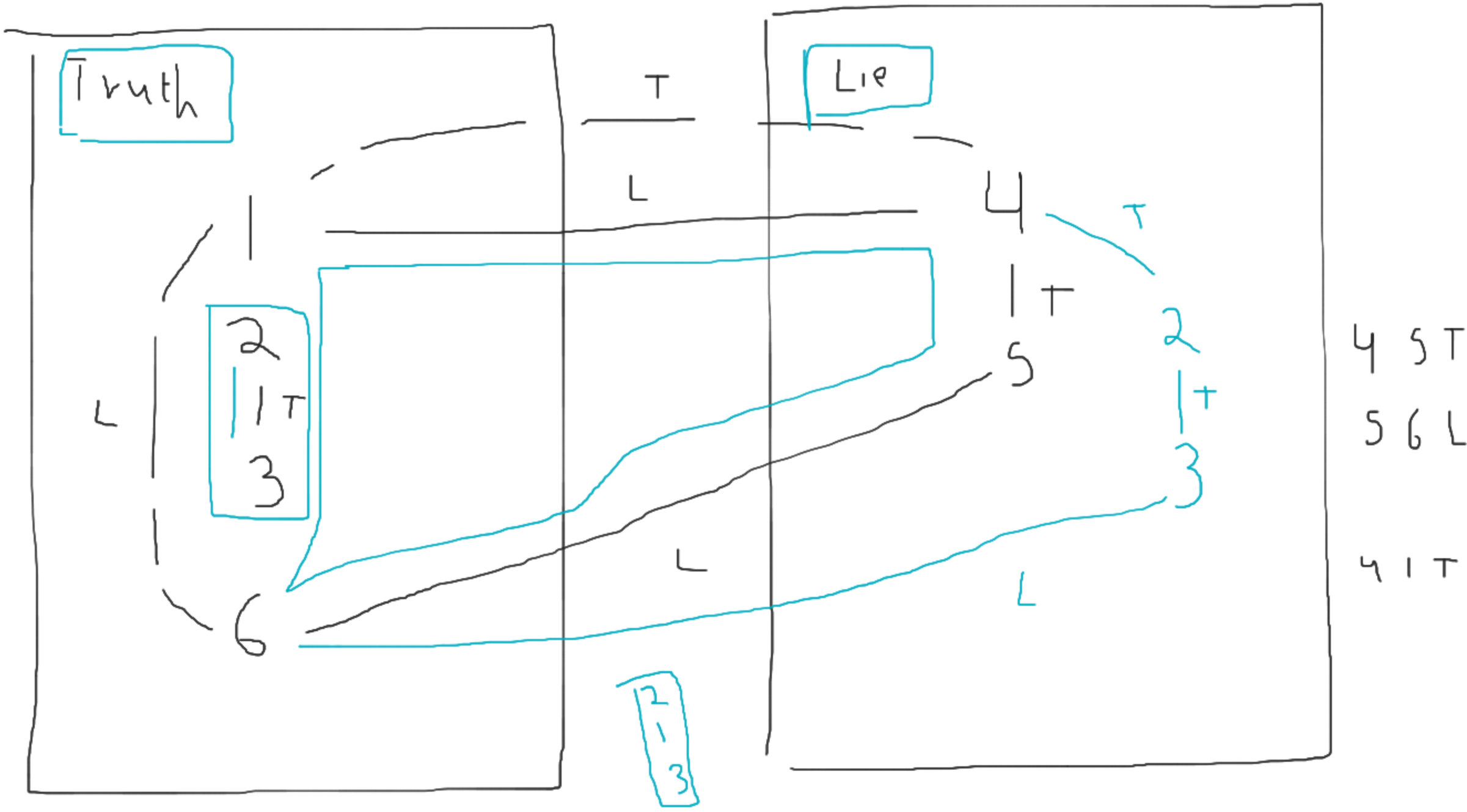

F
S
4
6
3
4
3
10
15
5
9
6

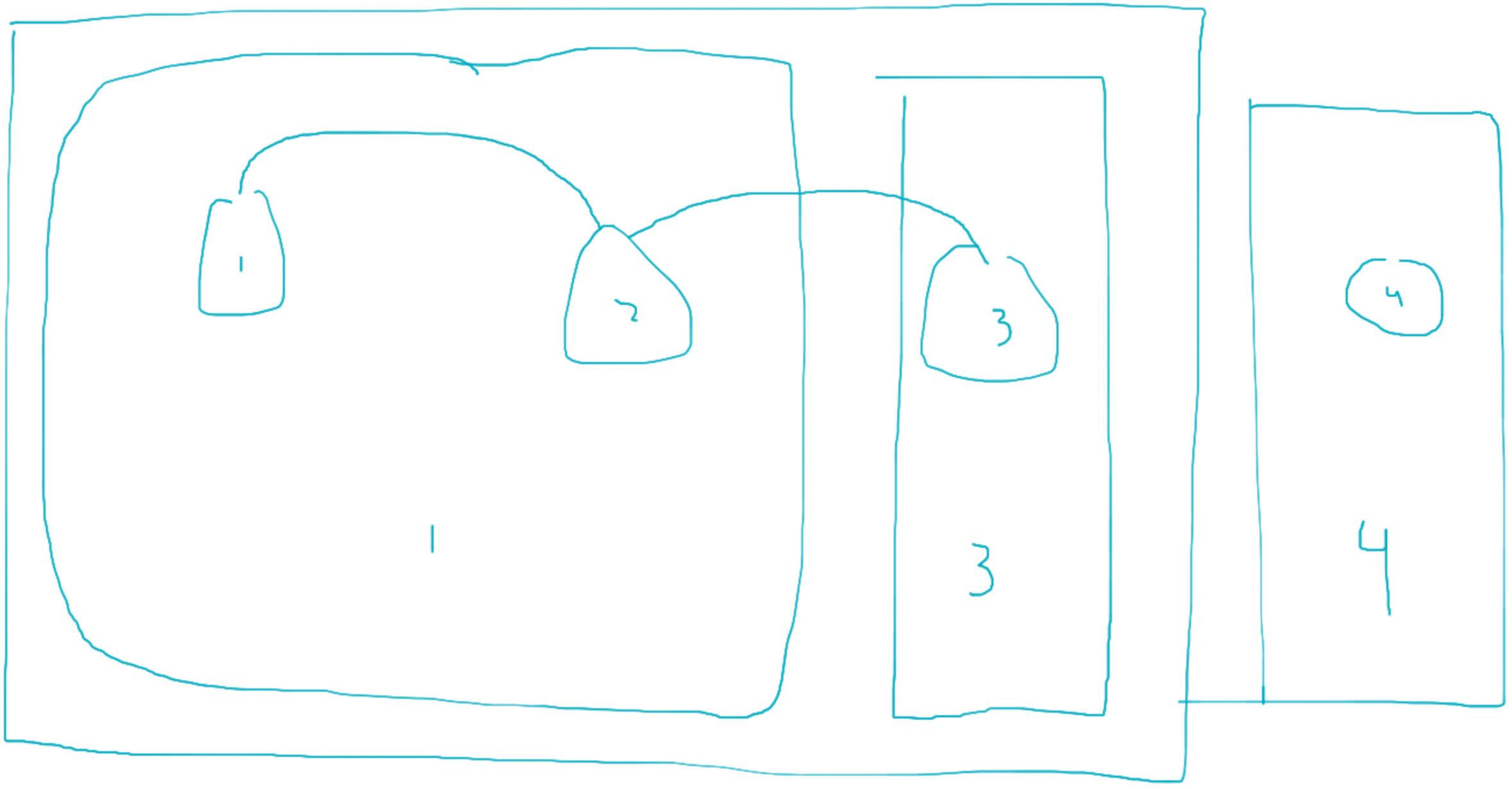

5
5

X y T/L

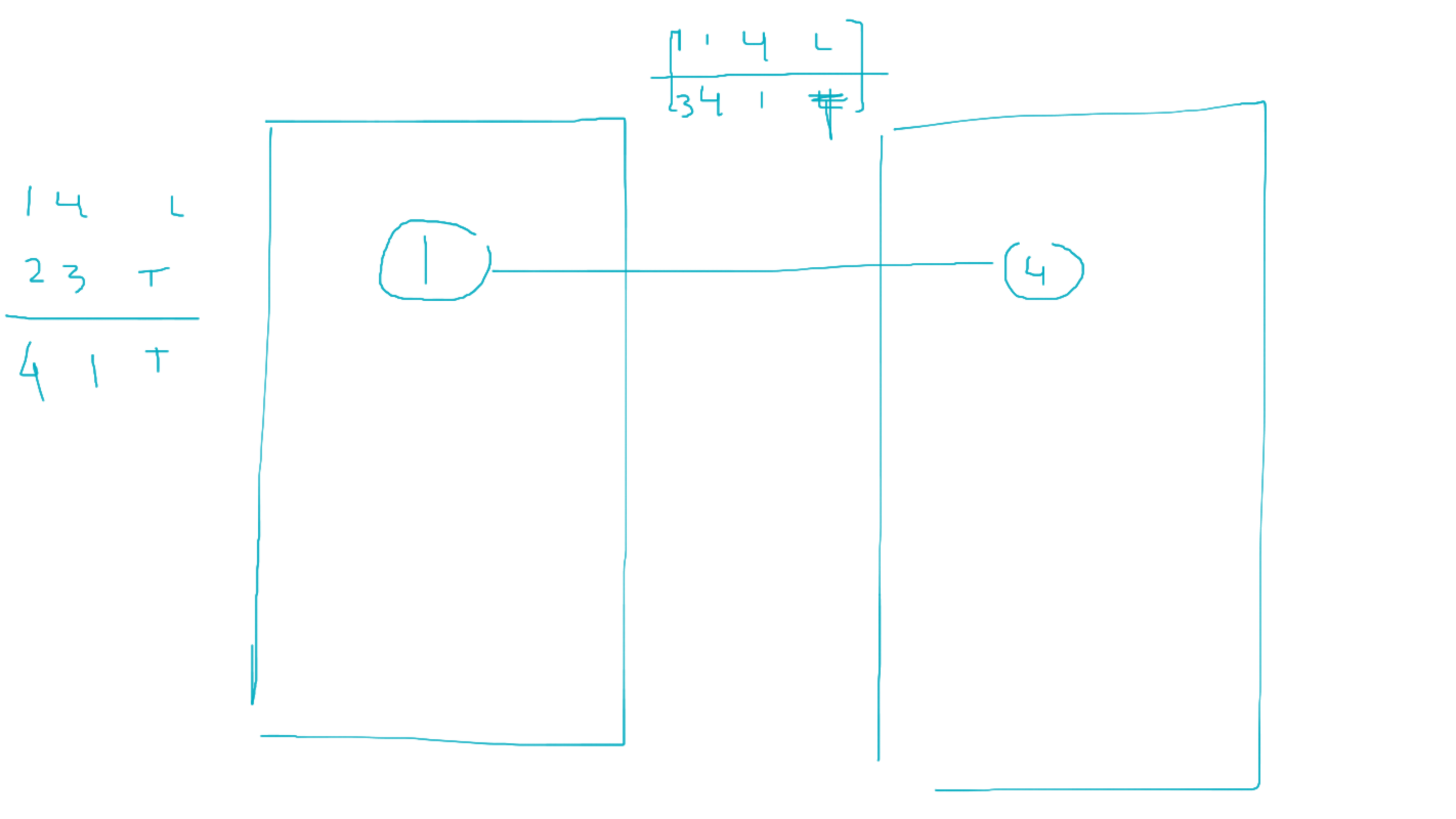


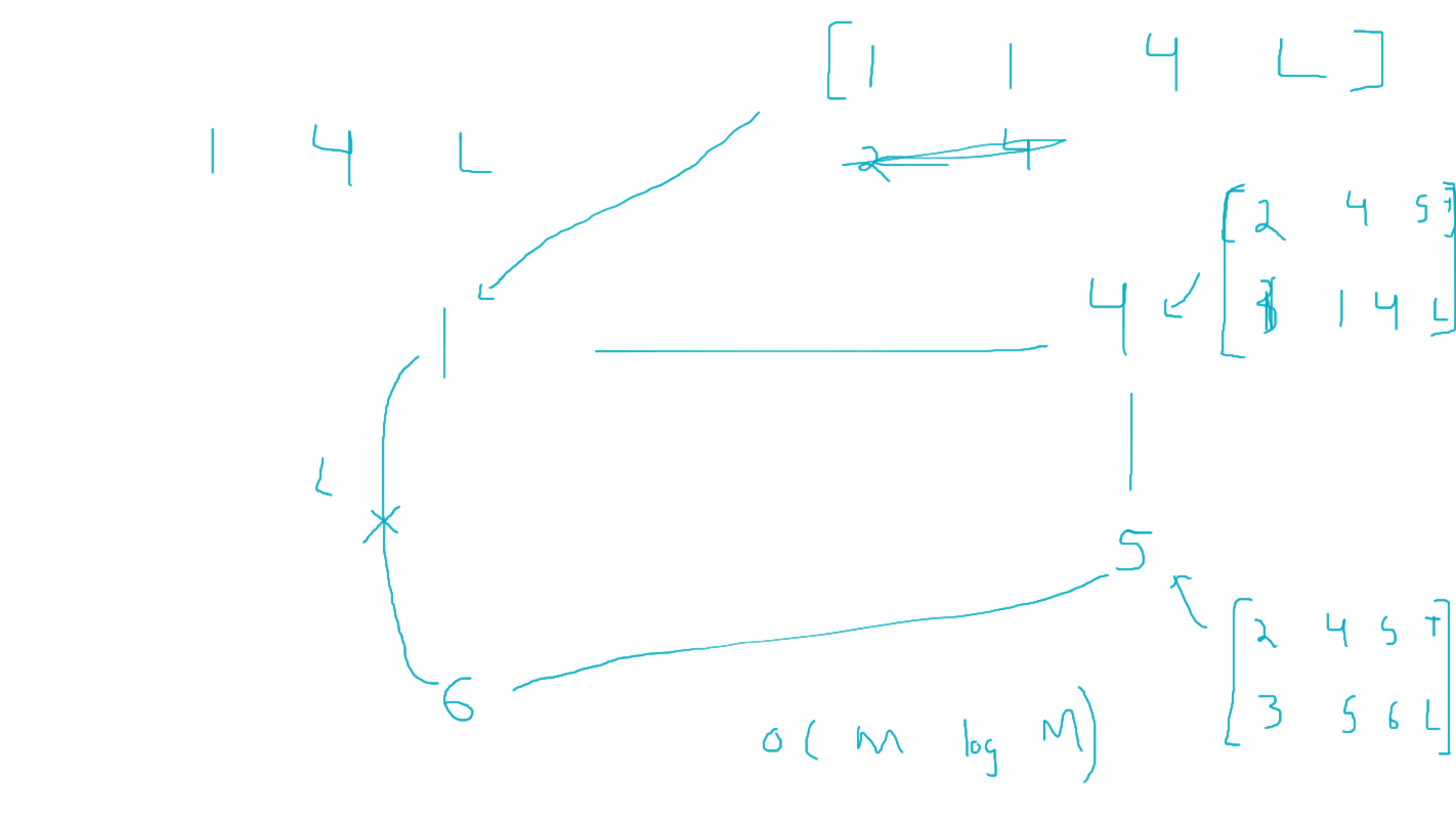
Break: 3:00 - 3:15


Truth
Lie
T
L
1
4
T
2
1T
3
L
1T
5
2
T
3
L
L
6
L
2
1
3
4 5 T
5 6 L
4 1 T


1
2
3
4
1
3
4


2
L
3

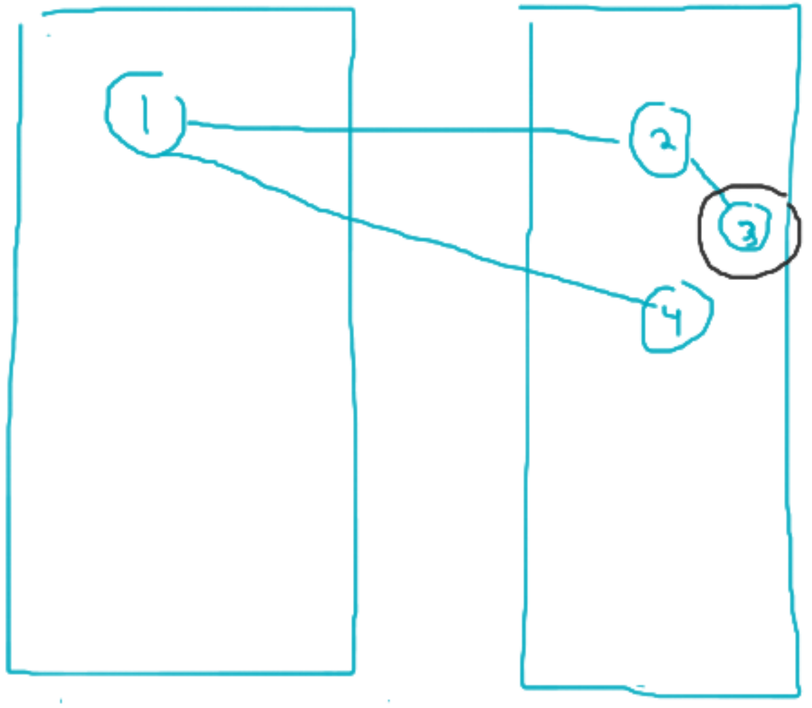

1 4 L
2 3 T
4 1 T
1 4 L
3 4 1 #
1
4


[1 1 4 L]
1 4 L
2 4
4
[2 4 5 7]
[3 1 4 L]
1
L
5
[2 4 5 7]
[3 5 6 L]
6
O(M log M)

1	3	4	L
2	1	2	L
3	2	3	T
4	4	1	L

1	2	3	4
[2 1 2 L	[1 2 1 L	[1 3 4 L	[1 4 3 L
4 1 4 L]	3 2 3 T]	3 3 2 T]	4 4 1 T]

A = 4



$N \quad 0 \le N \le 10^6$

$1 \longrightarrow 0$ YES

$\vdots$

$9 \longrightarrow 0$ YES

$19 \underline{5}$

$\searrow 190$

$10 \longrightarrow 9 \longrightarrow 0$ NO

$20 \rightarrow 18 \rightarrow 10$

$30 \rightarrow 27 \rightarrow 20$

0 NO

1 ... 9

for any i:

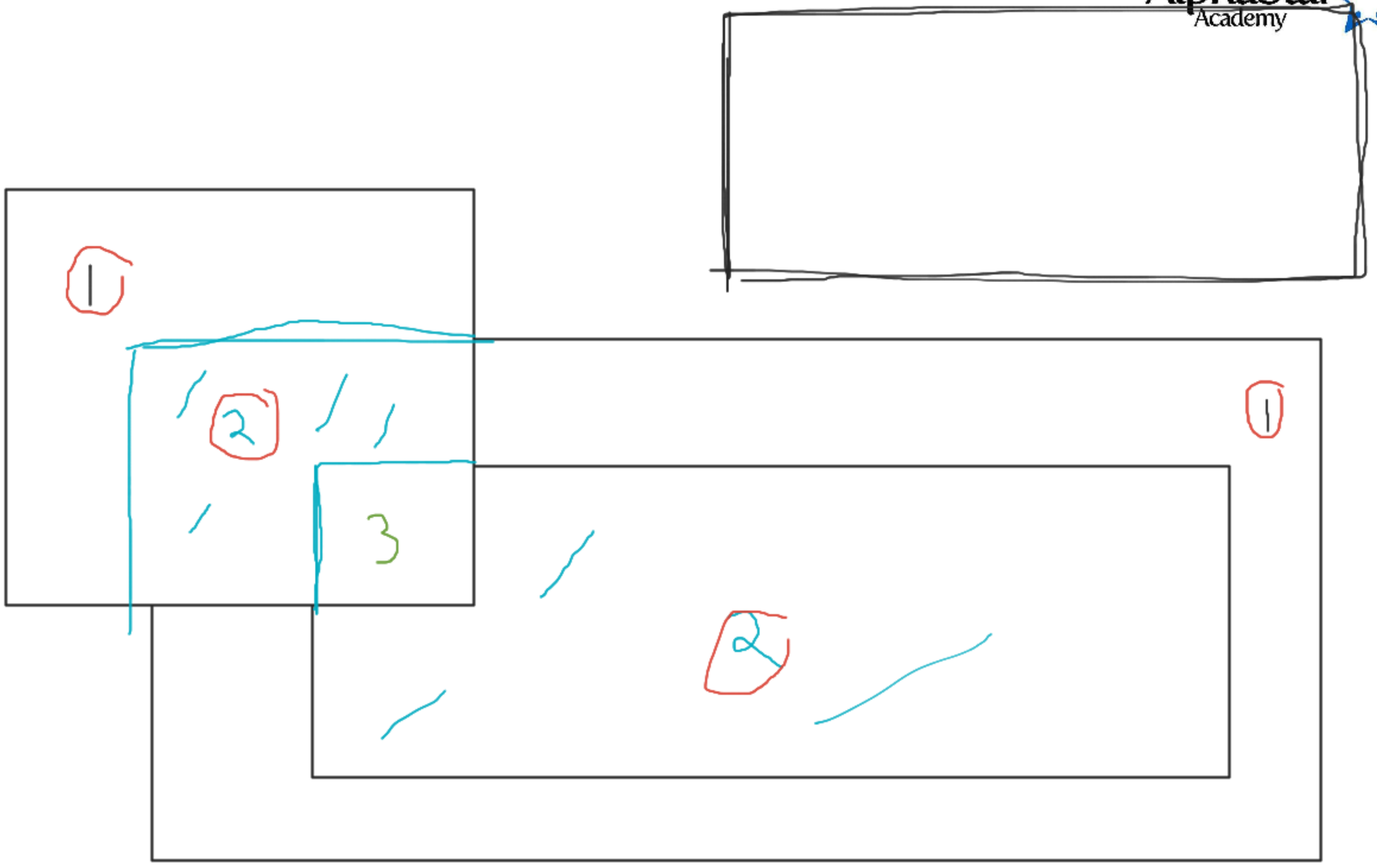
top, bot = largest, smallest digit

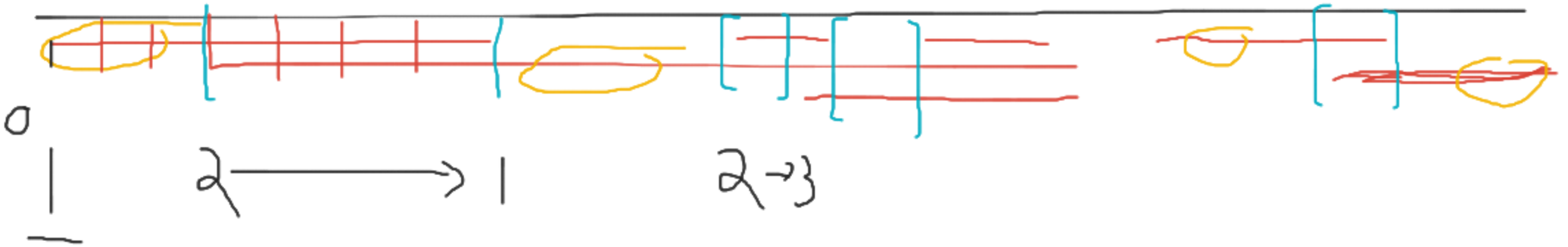
→

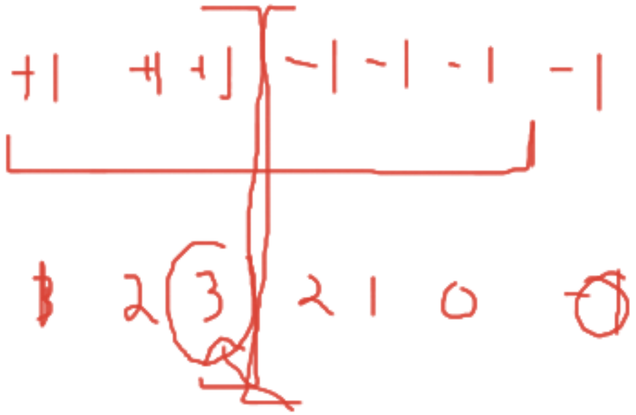
dp[i] = !dp[i - top]

|| !dp[i - bot]

Runtime: O(N)


1
2
3
1
2


0
1
2
1
2→3


+1 +1 +1 -1 -1 -1 -1
3 2 3 2 1 0 0