$P(0,x)$	$P(1,x)$	$P(2,x)$	$P(3,x)$	$P(4,x)$	$P(5,x)$	$P(6,x)$
F	F	T	F	T	F	T

Note $P(2,x) = T$ and is the least such value of t.
$t_0 = 2$

What is $\alpha(P(t,x))$

$t=$	0	1	2	3	4	5	6
	T	T	F	T	F	T	F

$\prod_{t=0}^{u} \alpha(P(t,x))$

$u =$	0	1	2	3	4	5	6
	1	1	0	0	0	0	0

$\sum_{u=0}^{y} \prod_{t=0}^{u} (\alpha(P(t,x))$

$y =$	0	1	2	3	4	5	6
	1	2	2	2	2	2	2

1 + add previous T

$g(y,x) = 2$
= least value for which t is true.

$$\min_{t \le y} P(t,x) = \begin{cases} g(y,x) & \text{if } (\exists t)_{\le y} P(t,x) \\ 0 & \text{otherwise} \end{cases}$$