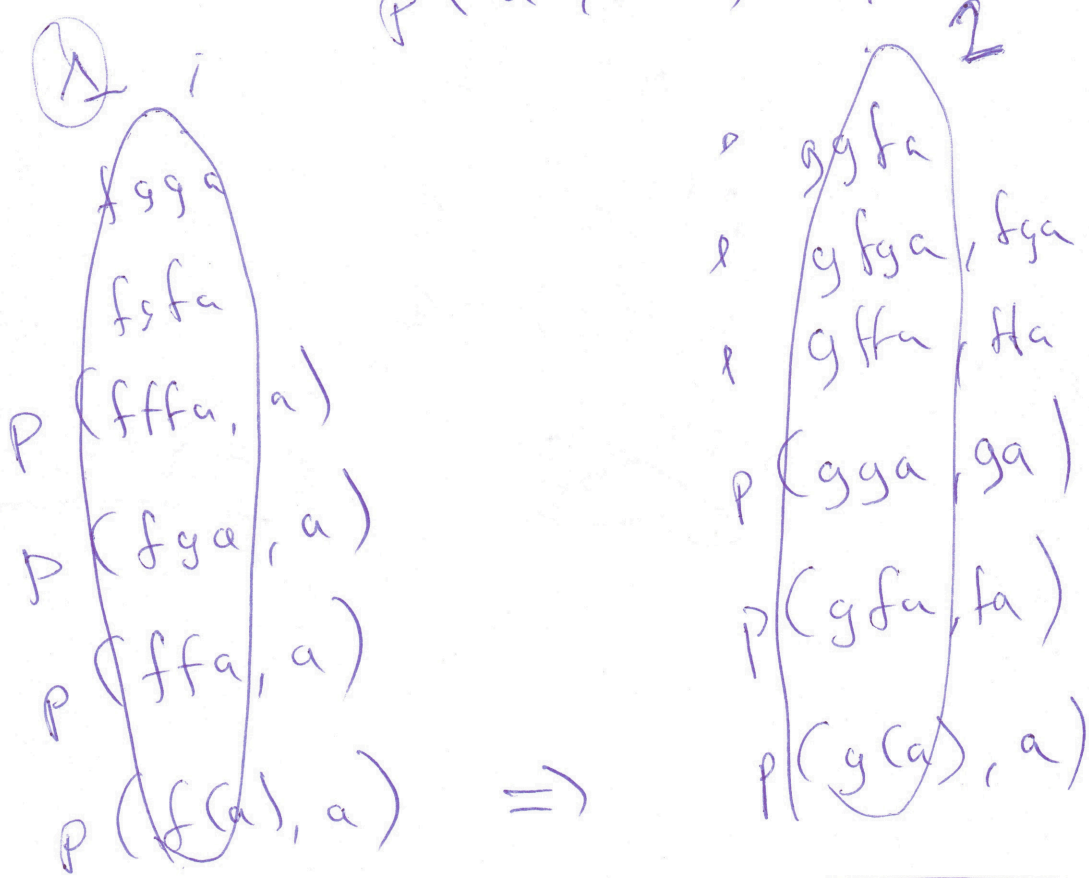
$D = \{a, fa, ga, ffa \ldots$

$a' = a \qquad f'(x) = f(x)$

$p(f(\ldots), \ldots)$ true

$p(g(\ldots), \ldots)$ false

$p(a, \ldots)$ false



$\Rightarrow$

$\forall x\, p(f(x), a) \Rightarrow \exists x\, p(g(x), x)$

$\Rightarrow \forall x\, p(f(x), a) \rightarrow \exists x\, p(g(x), x)$

↑

a fa ga ffa fga gfa ggfa ...