

plan	0	1	2	3
a_0	(0,0)	(1,0)	(2,0)	(3,0)
a_1	(0,0)	(1,0)	(2,0)	(3,0)

$$f = \begin{cases} \textit{True}, & X \neq 0 \\ \textit{False}, & \textit{otherwise} \end{cases} \quad (3)$$