$$(4) \\ (5) \\ (6) \\ (7) \\ (8) \\ (9) \\ (10) \\ (11) \\ (12) \\ (13) \\ \Pi\alpha, \beta: *.(nat \to \alpha) \to (\alpha \to nat \to \beta) \to nat \to \beta$$

(1)

(2)

(3)

nat:*

 $\alpha:*$

 $\beta:*$