

t16\_rewrite3  
(TMQo5JVXeBNWNSSYKWygo9MFxgCkyghoBhN)

October 27, 2020

Let  $l1\_rewrite3 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_rewrite3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_rewrite3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (l1\_rewrite3 X1 X0) \Rightarrow (\forall X2. \forall X3. \\ & \forall X4. (r1\_rewrite3 X0 X1 X2 X3 X4) \Leftrightarrow (k4\_tarski (k4\_tarski X2 \\ & X3) X4 \in u1\_rewrite3 X0 X1)) \end{aligned} \quad (1)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \\ & (l1\_rewrite3 X5 X0) \Rightarrow (\forall X6. (l1\_rewrite3 X6 X1) \Rightarrow (((u1\_rewrite3 \\ & X0 X5 = u1\_rewrite3 X1 X6) \wedge (r1\_rewrite3 X0 X5 X2 X3 X4)) \Rightarrow (r1\_rewrite3 \\ & X1 X6 X2 X3 X4))) \end{aligned}$$