

l6_fomodel2 (TMP- suZc4YWgRZPiVSKSU9CTuCpTxCAMHrrP)

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Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v11_fomodel1 : \iota \Rightarrow o$ be given. Let $l1_fomodel1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_fomodel2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k37_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $m3_fomodel2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funcop_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v6_struct_0 X0) \wedge ((v11_fomodel1 X0) \wedge (l1_fomodel1 \\ X0))) \Rightarrow (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow (\forall X2.(m3_fomodel2 \\ X2 X0 X1) \Rightarrow (r1_tarski (k37_fomodel1 X0) (k9_xtuple_0 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v6_struct_0 X0) \wedge ((v11_fomodel1 X0) \wedge (l1_fomodel1 \\ X0))) \Rightarrow (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow (\forall X2.((v1_relat_1 \\ X2) \wedge (v1_funct_1 X2)) \Rightarrow ((v1_fomodel2 X2 X0 X1) \Leftrightarrow ((m3_fomodel2 X2 \\ X0 X1) \wedge (v1_funcop_1 X2)))))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v6_struct_0 X0) \wedge ((v11_fomodel1 X0) \wedge (l1_fomodel1 \\ X0))) \Rightarrow (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow (\forall X2.((v1_relat_1 \\ X2) \wedge (v1_funct_1 X2)) \Rightarrow ((v1_fomodel2 X2 X0 X1) \Rightarrow (r1_tarski (k37_fomodel1 \\ X0) (k9_xtuple_0 X2)))))) \end{aligned}$$