

t32_graph_5
(TMQe3NRSnWykPzP4hFdBxp21HLi2rVjtt1j)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_graph_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v7_graph_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_graph_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_graph_5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_graph_5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_graph_5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_graph_1 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X3.((v7_graph_1 X3 X0) \wedge (m2_graph_1 \\ & X3 X0)) \Rightarrow (\forall X4.(r2_graph_5 X0 X1 X2 X3 X4) \Leftrightarrow ((r1_graph_5 X0 \\ & X3 X1 X2) \wedge (r1_tarski (k7_subset_1 (u1_struct_0 X0) (k2_graph_5 \\ & X0 X3) (k1_tarski X2)) X4)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (2)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v2_struct_0 X2) \wedge (l1_graph_1 \\ & X2)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 X2)) \Rightarrow (\forall X4. \\ & (m1_subset_1 X4 (u1_struct_0 X2)) \Rightarrow (\forall X5.((v7_graph_1 X5 \\ & X2) \wedge (m2_graph_1 X5 X2)) \Rightarrow (((r2_graph_5 X2 X3 X4 X5 X0) \wedge (r1_tarski \\ & X0 X1)) \Rightarrow (r2_graph_5 X2 X3 X4 X5 X1)))))) \end{aligned}$$