

t58_group_2 (TMGAZfLE- HwkKo87EGrR5Q9H5YQEupDzCvf3)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_group_1 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_group_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_struct_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_group_2 X1 X0) \Rightarrow (\forall X2. \\ (m1_group_2 X2 X0) \Rightarrow ((r1_tarski (u1_struct_0 X1) (u1_struct_0 \\ X2)) \Rightarrow (m1_group_2 X1 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge ((v2_group_1 X1) \wedge (\\ l3_algstr_0 X1))) \Rightarrow (\forall X2.(m1_group_2 X2 X1) \Rightarrow ((r1_struct_0 \\ X2 X0) \Rightarrow (r1_struct_0 X1 X0))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge (l3_algstr_0 \\ X0))) \Rightarrow (\forall X1.(m1_group_2 X1 X0) \Rightarrow ((\neg v2_struct_0 X1) \wedge ((v2_group_1 \\ X1) \wedge (l3_algstr_0 X1)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. (l3_algstr_0 X0) \Rightarrow (l1_struct_0 X0) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0. (l1_struct_0 X0) \Rightarrow (\forall X1. (r1_struct_0 X0 X1) \Leftrightarrow \\ (X1 \in u1_struct_0 X0)) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski\ X0\ X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow (X2 \in X1)) \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0\ X0)\wedge((v2_group_1\ X0)\wedge((v3_group_1 \\ & X0)\wedge(l3_algstr_0\ X0))))\Rightarrow(\forall X1.(m1_group_2\ X1\ X0)\Rightarrow(\forall X2. \\ & (m1_group_2\ X2\ X0)\Rightarrow((\forall X3.(m1_subset_1\ X3\ (u1_struct_0 \\ & X0))\Rightarrow((r1_struct_0\ X1\ X3)\Rightarrow(r1_struct_0\ X2\ X3))\Rightarrow(m1_group_2 \\ & X1\ X2)))) \end{aligned}$$