

t81_group_11

(TME_{x2f29SVBD7VHHMTQcGK4cK5Ez6JxcB1k})

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 $v1_group_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_group_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v15_algstr_0 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k4_group_11 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_group_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ & X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.((v1_group_3 X1 X0) \wedge (m1_group_2 \\ & X1 X0)) \Rightarrow (\forall X2.((v1_group_3 X2 X0) \wedge (m1_group_2 X2 X0)) \Rightarrow (\\ & \exists X3.((v15_algstr_0 X3) \wedge ((v1_group_3 X3 X0) \wedge (m1_group_2 \\ & X3 X0)))) \wedge (u1_struct_0 X3 = k4_group_11 X0 X1 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ & X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_group_2 X1 X0) \Rightarrow (\forall X2. \\ & (m1_group_2 X2 X0) \Rightarrow ((r1_tarski (u1_struct_0 X1) (u1_struct_0 \\ & X2)) \Rightarrow (m1_group_2 X1 X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ & X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_group_2 X1 X0) \Rightarrow (\forall X2. \\ & (m1_group_2 X2 X0) \Rightarrow (\forall X3.(m1_group_2 X3 X0) \Rightarrow ((m1_group_2 \\ & X2 X3) \Rightarrow (r1_tarski (k4_group_11 X0 X1 X2) (k4_group_11 X0 X1 X3)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ & X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_group_2 X1 X0) \Rightarrow (\forall X2. \\ & (m1_group_2 X2 X0) \Rightarrow (r1_tarski (k8_group_2 X0 X1) (k4_group_11 \\ & X0 X1 X2)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_group_2 X1 X0) \Rightarrow (k8_group_2 X0 X1 = u1_struct_0 X1)) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.((v1_group_3 X1 X0) \wedge (m1_group_2 X1 X0)) \Rightarrow (\forall X2.((v1_group_3 X2 X0) \wedge (m1_group_2 X2 X0)) \Rightarrow (\\ & \exists X3.((v15_algstr_0 X3) \wedge ((v1_group_3 X3 X0) \wedge (m1_group_2 X3 X0)))) \wedge ((u1_struct_0 X3 = k4_group_11 X0 X1 X1) \wedge (r1_tarski (k4_group_11 X0 X2 X1) (k4_group_11 X0 X2 X3)))))) \end{aligned}$$