

t23_anproj_1

(TMKkuS2NkaL2JB3hVqEinuGFPp8hBUprVa)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rlvect_1 : \iota \Rightarrow o$ be given. Let $v6_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_rlvect_1 : \iota \Rightarrow o$ be given. Let $v8_rlvect_1 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_anproj_1 : \iota \Rightarrow \iota$ be given. Let $k3_anproj_1 : \iota \Rightarrow \iota$ be given. Let $u1_collsp : \iota \Rightarrow \iota$ be given. Let $k4_anproj_1 : \iota \Rightarrow \iota$ be given. Let $m1_collsp : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $g1_collsp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_collsp : \iota \Rightarrow o$ be given. Let $l1_collsp : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_collsp X1 X0) \Rightarrow (\forall X2. \forall X3. \\ & (g1_collsp X0 X1 = g1_collsp X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((\neg v7_struct_0 X0) \wedge ((v13_algstr_0 \\ & X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge \\ & ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 \\ & X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow ((v1_collsp (k5_anproj_1 X0)) \wedge \\ & (l1_collsp (k5_anproj_1 X0))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((\neg v7_struct_0 X0) \wedge ((v13_algstr_0 \\ & X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge \\ & ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 \\ & X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow (m1_collsp (k4_anproj_1 X0) \\ & (k3_anproj_1 X0)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((\neg v7_struct_0 X0) \wedge ((v13_algstr_0 \\ & X0) \wedge ((v2_rlvect_1 X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge \\ & ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 \\ & X0) \wedge (l1_rlvect_1 X0)))))))))) \Rightarrow (k5_anproj_1 X0 = g1_collsp (\\ & k3_anproj_1 X0) (k4_anproj_1 X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(l1_collsp\ X0)\Rightarrow((v1_collsp\ X0)\Rightarrow(X0 = g1_collsp\ (u1_struct_0\ X0)\ (u1_collsp\ X0))) \quad (5)$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0)\wedge((\neg v7_struct_0\ X0)\wedge((v13_algstr_0\ X0)\wedge((v2_rlvect_1\ X0)\wedge((v3_rlvect_1\ X0)\wedge((v4_rlvect_1\ X0)\wedge \\ ((v5_rlvect_1\ X0)\wedge((v6_rlvect_1\ X0)\wedge((v7_rlvect_1\ X0)\wedge((v8_rlvect_1\ X0)\wedge(l1_rlvect_1\ X0))))))))))\Rightarrow((u1_struct_0\ (k5_anproj_1\ X0) = k3_anproj_1\ X0)\wedge(u1_collsp\ (k5_anproj_1\ X0) = k4_anproj_1\ X0)) \end{aligned}$$