

t30_rlsb_1 (TMTdPzB- WSqjc8biC7BGdPV3W2oKxb4u9aBy)

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Let $v2_struct_0 : \iota \Rightarrow o$ 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 $v1_rlvect_1 : \iota \Rightarrow o$ be given. Let $m1_rlsub_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v2_rlvect_1 \\ & X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v5_rlvect_1 X0) \wedge \\ & ((v6_rlvect_1 X0) \wedge (v7_rlvect_1 X0) \wedge (v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ & X0)))))) \Rightarrow (\forall X1. (m1_rlsub_1 X1 X0) \Rightarrow (\forall X2. (m1_rlsub_1 \\ & X2 X0) \Rightarrow ((r1_tarski (u1_struct_0 X1) (u1_struct_0 X2)) \Rightarrow (m1_rlsub_1 \\ & X1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v1_rlvect_1 \\ & X0) \wedge (v2_rlvect_1 X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge \\ & ((v5_rlvect_1 X0) \wedge (v6_rlvect_1 X0) \wedge (v7_rlvect_1 X0) \wedge (v8_rlvect_1 \\ & X0) \wedge (l1_rlvect_1 X0)))))) \Rightarrow (\forall X1. ((\neg v2_struct_0 \\ & X1) \wedge (v13_algstr_0 X1) \wedge (v1_rlvect_1 X1) \wedge (v2_rlvect_1 X1) \wedge \\ & ((v3_rlvect_1 X1) \wedge (v4_rlvect_1 X1) \wedge (v5_rlvect_1 X1) \wedge (v6_rlvect_1 \\ & X1) \wedge (v7_rlvect_1 X1) \wedge (v8_rlvect_1 X1) \wedge (l1_rlvect_1 X1)))))) \Rightarrow \\ & (((m1_rlsub_1 X0 X1) \wedge (m1_rlsub_1 X1 X0)) \Rightarrow (X0 = X1)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v2_rlvect_1 \\ & X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v5_rlvect_1 X0) \wedge \\ & ((v6_rlvect_1 X0) \wedge (v7_rlvect_1 X0) \wedge (v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ & X0)))))) \Rightarrow (\forall X1. (m1_rlsub_1 X1 X0) \Rightarrow ((\neg v2_struct_0 \\ & X1) \wedge (v13_algstr_0 X1) \wedge (v2_rlvect_1 X1) \wedge (v3_rlvect_1 X1) \wedge \\ & ((v4_rlvect_1 X1) \wedge (v5_rlvect_1 X1) \wedge (v6_rlvect_1 X1) \wedge (v7_rlvect_1 \\ & X1) \wedge (v8_rlvect_1 X1) \wedge (l1_rlvect_1 X1)))))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1_tarSKI X0 X1) \wedge (r1_tarSKI X1 X0)) \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v2_rlvect_1 \\ & X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v5_rlvect_1 X0) \wedge \\ & ((v6_rlvect_1 X0) \wedge (v7_rlvect_1 X0) \wedge (v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ & X0)))))) \Rightarrow (\forall X1.((v1_rlvect_1 X1) \wedge (m1_rlsub_1 X1 X0)) \Rightarrow \\ & (\forall X2.((v1_rlvect_1 X2) \wedge (m1_rlsub_1 X2 X0)) \Rightarrow ((u1_struct_0 \\ & X1 = u1_struct_0 X2) \Rightarrow (X1 = X2)))) \end{aligned}$$