

t2_rlvect_4

(TMYkJbj3JtG2Ly9w2mTtZskWfBYNNAEHJrQ)

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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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_rlvect_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
 & X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
 & ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\
 & X0)))))))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\
 & (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((k5_algstr_0 \\
 & X0 (k3_rlvect_1 X0 X1 X2) X1 = X2) \wedge ((k5_algstr_0 X0 (k3_rlvect_1 \\
 & X0 X2 X1) X1 = X2) \wedge ((k3_rlvect_1 X0 (k5_algstr_0 X0 X1 X1) X2 = X2) \wedge \\
 & ((k3_rlvect_1 X0 (k5_algstr_0 X0 X2 X1) X1 = X2) \wedge ((k3_rlvect_1 X0 \\
 & X1 (k5_algstr_0 X0 X2 X1) = X2) \wedge ((k3_rlvect_1 X0 X2 (k5_algstr_0 \\
 & X0 X1 X1) = X2) \wedge (k5_algstr_0 X0 X1 (k5_algstr_0 X0 X1 X2) = X2)))))))))) \\
 & \tag{1}
 \end{aligned}$$

Theorem 1

$$\begin{aligned}
 & \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v2_rlvect_1 \\
 & X0) \wedge ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge \\
 & ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\
 & X0)))))))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\
 & (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 \\
 & X3 (u1_struct_0 X0)) \Rightarrow ((k5_algstr_0 X0 X1 X2 = k5_algstr_0 X0 X3 X2) \Rightarrow \\
 & (X1 = X3))))))
 \end{aligned}$$