

t19_rlvect_2

(TMbG7cDthzLd8GGoFYCh9HnLRusEfAMd6sX)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_rlvect_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k3_rlvect_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $m2_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1_algstr_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l2_struct_0 X0)) \Rightarrow (\forall X1. \\ & (m1_rlvect_2 X1 X0) \Rightarrow (m2_funct_2 X1 (u1_struct_0 X0) k1_numbers \\ & (k9_funct_2 (u1_struct_0 X0) k1_numbers))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. (l2_algstr_0 X0) \Rightarrow ((l2_struct_0 X0) \wedge (l1_algstr_0 X0)) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l2_algstr_0 X0)) \Rightarrow (\forall X1. \\ & (m2_funct_2 X1 (u1_struct_0 X0) k1_numbers (k9_funct_2 (u1_struct_0 \\ & X0) k1_numbers)) \Rightarrow (k3_rlvect_2 X0 X1 = ReplSep (toset (\lambda X2 : \iota. \\ & m1_subset_1 X2 (u1_struct_0 X0))) (\lambda X2 : \iota. k3_funct_2 (u1_struct_0 \\ & X0) k1_numbers X1 X2 \neq k6_numbers) (\lambda X2 : \iota. X2)))) \end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l2_algstr_0 X0)) \Rightarrow (\forall X1. \\ & (m1_rlvect_2 X1 X0) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 \\ & X0)) \Rightarrow ((k3_funct_2 (u1_struct_0 X0) k1_numbers X1 X2 = k6_numbers) \Leftrightarrow \\ & (\neg X2 \in k3_rlvect_2 X0 X1)))) \end{aligned}$$