

t72_rlsb_1

(TMP8d3ArJB77SGR2nXuS1NiPDnhGacwWVWi)

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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 $m2_rlsub_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_rlsub_1 : \iota \Rightarrow \iota$ be given. Let $k3_rlsub_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_rlsub_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_rlvect_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v2_rlvect_1 \\ & X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v5_rlvect_1 X0) \wedge \\ & ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ & X0)))))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\ & (k3_rlsub_1 X0 X1 (k1_rlsub_1 X0) = k6_domain_1 (u1_struct_0 X0) \\ & X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge (v13_algstr_0 \\ & X0) \wedge (v2_rlvect_1 X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge \\ & ((v5_rlvect_1 X0) \wedge ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 \\ & X0) \wedge (l1_rlvect_1 X0)))))) \wedge (m1_subset_1 X1 (u1_struct_0 \\ & X0)) \wedge (m1_rlsub_1 X2 X0)) \Rightarrow (m1_subset_1 (k3_rlsub_1 X0 X1 X2) (\\ & k1_zfmisc_1 (u1_struct_0 X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v2_rlvect_1 \\ & X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v5_rlvect_1 X0) \wedge \\ & ((v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge ((v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\ & X0)))))) \Rightarrow ((v1_rlvect_1 (k1_rlsub_1 X0)) \wedge (m1_rlsub_1 (k1_rlsub_1 \\ & X0) X0)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v2_rlvect_1 \\
& X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v5_rlvect_1 X0) \wedge \\
& ((v6_rlvect_1 X0) \wedge (v7_rlvect_1 X0) \wedge (v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\
& X0)))))) \Rightarrow (\forall X1.(m1_rlsub_1 X1 X0) \Rightarrow (\forall X2.(m1_subset_1 \\
& X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((m2_rlsub_1 X2 X0 X1) \Leftrightarrow (\exists X3. \\
& (m1_subset_1 X3 (u1_struct_0 X0)) \wedge (X2 = k3_rlsub_1 X0 X3 X1))))))
\end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge (v2_rlvect_1 \\
& X0) \wedge (v3_rlvect_1 X0) \wedge (v4_rlvect_1 X0) \wedge (v5_rlvect_1 X0) \wedge \\
& ((v6_rlvect_1 X0) \wedge (v7_rlvect_1 X0) \wedge (v8_rlvect_1 X0) \wedge (l1_rlvect_1 \\
& X0)))))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\
& (m2_rlsub_1 (k6_domain_1 (u1_struct_0 X0) X1) X0 (k1_rlsub_1 X0)))
\end{aligned}$$