

t10_rltopsp1 (TMK- fEzNTgH4KWSqvrMapVEkkzmNKzsh216m)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_rusub_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge (l2_algstr_0 X0)) \Rightarrow (\forall X1. \\
 & \quad (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\forall X2. \\
 & \quad (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (k6_rusub_4 \\
 X0 X1 X2 = ReplSep2 (toset (\lambda X3 : \iota. m1_subset_1 X3 (u1_struct_0 \\
 X0))) (\lambda X3 : \iota. toset (\lambda X4 : \iota. m1_subset_1 X4 (u1_struct_0 \\
 X0))) (\lambda X3 : \iota. \lambda X4 : \iota. (X3 \in X1) \wedge (X4 \in X2)) (\lambda X3 : \iota. \\
 \lambda X4 : \iota. k1_algstr_0 X0 X3 X4)))))) \quad (1)
 \end{aligned}$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (2)$$

Theorem 1

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge (l2_algstr_0 X0)) \Rightarrow (\forall X1. \\
 & \quad (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\forall X2. \\
 & \quad (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\forall X3. \\
 & \quad (m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((r1_tarski \\
 X1 X2) \Rightarrow (r1_tarski (k6_rusub_4 X0 X1 X3) (k6_rusub_4 X0 X2 X3))))))
 \end{aligned}$$