

t8_group_2
(TMZnEwh6Z3n45L7DhqTwwnCTBSyuNAtC4QP)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ 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 $k2_group_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge (l3_algstr_0 X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (k2_group_2 \\
& X0 X1 X2 = ReplSep2 (toset (\lambda X3 : \iota. m1_subset_1 X3 (u1_struct_0 \\
& X0)))) (\lambda X3 : \iota. toset (\lambda X4 : \iota. m1_subset_1 X4 (u1_struct_0 \\
& X0))) (\lambda X3 : \iota. \lambda X4 : \iota. (X3 \in X1) \wedge (X4 \in X2)) (\lambda X3 : \iota. \\
& \lambda X4 : \iota. k6_algstr_0 X0 X3 X4)))) \quad (1)
\end{aligned}$$

Theorem 1

$$\begin{aligned}
& \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge (l3_algstr_0 X1)) \Rightarrow \\
& (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X1))) \Rightarrow \\
& (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X1))) \Rightarrow \\
& ((X0 \in k2_group_2 X1 X2 X3) \Leftrightarrow (\exists X4. (m1_subset_1 X4 (u1_struct_0 \\
& X1)) \wedge (\exists X5. (m1_subset_1 X5 (u1_struct_0 X1)) \wedge ((X0 = k6_algstr_0 \\
& X1 X4 X5) \wedge ((X4 \in X2) \wedge (X5 \in X3)))))))
\end{aligned}$$