

t52_group_11
(TMLGveHWuFKJx8hfuk1AuDsyLk7k7ydcPUg)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_group_1 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_group_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k13_group_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_group_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_group_11 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\
& X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1. (m1_group_2 X1 X0) \Rightarrow (\forall X2. \\
& (m1_group_2 X2 X0) \Rightarrow (k4_group_11 X0 X1 X2 = ReplSep (toset (\lambda X3 : \\
& \iota. m1_subset_1 X3 (u1_struct_0 X0))) (\lambda X3 : \iota. \neg r1_xboole_0 \\
& (k13_group_2 X0 X2 X3) (k8_group_2 X0 X1)) (\lambda X3 : \iota. X3))))))
\end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned}
& \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\
& X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1. (m1_group_2 X1 X0) \Rightarrow (\forall X2. \\
& (m1_group_2 X2 X0) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 X0) \Rightarrow \\
& ((\neg r1_xboole_0 (k13_group_2 X0 X1 X3) (k8_group_2 X0 X2)) \Rightarrow (X3 \in \\
& k4_group_11 X0 X2 X1))))))
\end{aligned}$$