

t80_group_3 (TMSc- cvwaocR6LhWHgtp3BpYHgG1nUZU3zHC)

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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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k7_group_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_group_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_group_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_group_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_group_2 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ &X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow &(k5_group_3 X0 (k8_group_2 X0 (k7_group_2 X0)) X1 = ReplSep \\ &(toset (\lambda X2 : \iota. m1_subset_1 X2 (u1_struct_0 X0))) (\lambda X2 : \\ &\iota. r2_group_3 X0 X1 X2) (\lambda X2 : \iota. X2))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (&(\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ &X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow &(k7_group_3 X0 X1 = k5_group_3 X0 (k8_group_2 X0 (k7_group_2 \\ &X0)) X1)) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0. \forall X1. (&(\neg v2_struct_0 X1) \wedge ((v2_group_1 X1) \wedge \\ &(v3_group_1 X1) \wedge (l3_algstr_0 X1))) \Rightarrow (\forall X2. (m1_subset_1 \\ X2 (u1_struct_0 X1)) \Rightarrow &((X0 \in k7_group_3 X1 X2) \Leftrightarrow (\exists X3. (m1_subset_1 \\ X3 (u1_struct_0 X1)) \wedge &((X3 = X0) \wedge (r2_group_3 X1 X2 X3)))))) \end{aligned}$$