

t86_group_3

(TMFe4NHp665TLdAKsW7RwMX8FN3SNQ3aKm6)

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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 $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_group_1 : \iota \Rightarrow \iota$ be given. Let $r2_group_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((X1 \in k7_group_3 \\ X0 X2) \Leftrightarrow (r2_group_3 X0 X1 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v2_struct_0 X1) \wedge ((v2_group_1 X1) \wedge (\\ v3_group_1 X1) \wedge (l3_algstr_0 X1)))) \Rightarrow (\forall X2.(m1_subset_1 \\ X2 (u1_struct_0 X1)) \Rightarrow ((X0 \in k7_group_3 X1 X2) \Leftrightarrow (\exists X3.(m1_subset_1 \\ X3 (u1_struct_0 X1)) \wedge ((X3 = X0) \wedge (r2_group_3 X1 X2 X3)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge ((v3_group_1 \\ X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (((r2_group_3 X0 X1 (k1_group_1 X0)) \vee (r2_group_3 X0 (k1_group_1 \\ X0) X1)) \Rightarrow (X1 = k1_group_1 X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\neg(X0 \in X1) \wedge ((m1_subset_1 X1 (\\ k1_zfmisc_1 X2)) \wedge (v1_xboole_0 X2)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0)\wedge((v2_group_1 X0)\wedge((v3_group_1 X0)\wedge(l3_algstr_0 X0))))\wedge((m1_subset_1 X1 (u1_struct_0 X0))\wedge(m1_subset_1 X2 (u1_struct_0 X0))))\Rightarrow(r2_group_3 X0 X1 X1) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow(k6_domain_1 X0 X1 = k1_tarski X1) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2_struct_0 X0)\wedge((v2_group_1 X0)\wedge((v3_group_1 X0)\wedge(l3_algstr_0 X0))))\wedge(m1_subset_1 X1 (u1_struct_0 X0)))\Rightarrow(m1_subset_1 (k7_group_3 X0 X1) (k1_zfmisc_1 (u1_struct_0 X0))) \quad (7)$$

Assume the following.

$$\forall X0.(l3_algstr_0 X0)\Rightarrow(m1_subset_1 (k1_group_1 X0) (u1_struct_0 X0)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow(X2 = X0)) \quad (9)$$

Theorem 1

$$\forall X0.(((\neg v2_struct_0 X0)\wedge((v2_group_1 X0)\wedge((v3_group_1 X0)\wedge(l3_algstr_0 X0))))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow((k7_group_3 X0 X1 = k6_domain_1 (u1_struct_0 X0) (k1_group_1 X0))\Leftrightarrow(X1 = k1_group_1 X0))))$$