

t54_group_2
(TMQKXi9MgXNBtAVou77dzgkMaARSos68f3i)

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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 $v1_relat_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $u2_algstr_0 : \iota \Rightarrow \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_realset1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow ((r1_tarski (k9_xtuple_0 X1) X0) \Rightarrow (k5_relat_1 X1 X0 = X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski X0 X0 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v4_relat_1 X1 X0)) \Rightarrow (k1_relset_1 X0 X1 = k9_xtuple_0 X1) \quad (4)$$

Assume the following.

$$\forall X0. (l3_algstr_0 X0) \Rightarrow ((v1_funct_1 (u2_algstr_0 X0)) \wedge ((v1_funct_2 (u2_algstr_0 X0) (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) (u1_struct_0 X0)) \wedge (m1_subset_1 (u2_algstr_0 X0) (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) (u1_struct_0 X0)))))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge(v4_relat_1 X1 X0))\Rightarrow(m1_subset_1 (k1_relset_1 X0 X1) (k1_zfmisc_1 X0)) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0)\wedge((v2_group_1 X0)\wedge(l3_algstr_0 \\ X0)))\Rightarrow(\forall X1.((\neg v2_struct_0 X1)\wedge((v2_group_1 X1)\wedge(l3_algstr_0 \\ X1)))\Rightarrow((m1_group_2 X1 X0)\Leftrightarrow((r1_tarski (u1_struct_0 X1) (u1_struct_0 \\ X0))\wedge(u2_algstr_0 X1 = k1_realset1 (u2_algstr_0 X0) (u1_struct_0 \\ X1)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0)\Rightarrow(\forall X1.k1_realset1 X0 X1 = k5_relat_1 X0 (k2_zfmisc_1 X1 X1)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((v4_relat_1 X2 X0)\wedge(v5_relat_1 X2 X1)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (10)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0)\wedge((v2_group_1 X0)\wedge((v3_group_1 X0)\wedge(l3_algstr_0 X0))))\Rightarrow(m1_group_2 X0 X0)$$