

t151_group_2

(TMHuJxpLsBsNDuERhkqv98s5BZ7vT5cEBDz)

October 27, 2020

Let $v2_struct.0 : \iota \Rightarrow o$ be given. Let $v15_algstr.0 : \iota \Rightarrow o$ 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 $v1_finset.1 : \iota \Rightarrow o$ be given. Let $k15_group.2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_group.2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np.1 : \iota$ be given. Let $k1_card.1 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $u1_struct.0 : \iota \Rightarrow \iota$ be given. Let $k5_setfam.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_group.2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal.0 : \iota \Rightarrow o$ be given. Let $m2_subset.1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Let $k5_card.1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(k1_card.1 X0 = np.1) \Leftrightarrow (\exists X1.X0 = k1_tarski X1) \quad (1)$$

Assume the following.

$$\forall X0.k3_tarski (k1_tarski X0) = X0 \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct.0 X0) \wedge ((v15_algstr.0 X0) \wedge ((v2_group.1 \\ X0) \wedge ((v3_group.1 X0) \wedge (l3_algstr.0 X0)))) \Rightarrow (\forall X1.((v15_algstr.0 \\ X1) \wedge (m1_group.2 X1 X0) \Rightarrow ((k15_group.2 X0 X1 = k1_tarski (u1_struct.0 \\ X0)) \Rightarrow (X1 = X0)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct.0 X0) \wedge ((v2_group.1 X0) \wedge ((v3_group.1 \\ X0) \wedge (l3_algstr.0 X0)))) \Rightarrow (\forall X1.(m1_group.2 X1 X0) \Rightarrow ((k5_setfam.1 \\ (u1_struct.0 X0) (k15_group.2 X0 X1) = u1_struct.0 X0) \wedge (k5_setfam.1 \\ (u1_struct.0 X0) (k16_group.2 X0 X1) = u1_struct.0 X0))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} ((v2_xxreal.0 np.1) \wedge (m2_subset.1 np.1 k1_numbers k5_numbers)) \wedge \\ ((m1_subset.1 np.1 k5_numbers) \wedge (m1_subset.1 np.1 k1_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0)))\Rightarrow(k5_setfam_1 X0 X1 = k3_tarski X1) \quad (6)$$

Assume the following.

$$\forall X0.(v1_finset_1 X0)\Rightarrow(k5_card_1 X0 = k1_card_1 X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2_struct_0 X0)\wedge((v2_group_1 X0)\wedge((v3_group_1 X0)\wedge(l3_algstr_0 X0))))\wedge(m1_group_2 X1 X0))\Rightarrow(m1_subset_1 (k15_group_2 X0 X1) (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X0)))) \quad (8)$$

Assume the following.

$$\forall X0.(((\neg v2_struct_0 X0)\wedge((v2_group_1 X0)\wedge((v3_group_1 X0)\wedge(l3_algstr_0 X0))))\Rightarrow(\forall X1.(m1_group_2 X1 X0)\Rightarrow((v1_finset_1 (k15_group_2 X0 X1))\Rightarrow(\forall X2.(m1_subset_1 X2 k5_numbers)\Rightarrow((X2 = k18_group_2 X0 X1)\Leftrightarrow(\exists X3.(v1_finset_1 X3)\wedge((X3 = k15_group_2 X0 X1)\wedge(X2 = k5_card_1 X3)))))))) \quad (9)$$

Theorem 1

$$\forall X0.(((\neg v2_struct_0 X0)\wedge((v15_algstr_0 X0)\wedge((v2_group_1 X0)\wedge((v3_group_1 X0)\wedge(l3_algstr_0 X0))))\Rightarrow(\forall X1.((v15_algstr_0 X1)\wedge(m1_group_2 X1 X0))\Rightarrow(((v1_finset_1 (k15_group_2 X0 X1))\wedge(k18_group_2 X0 X1 = np_1))\Rightarrow(X1 = X0))))$$