

t1_compos_0 (TMSBaL-
cWqeDMTy5zKF9QMPaDKBzfaDCLEEEJ)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_compos_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_compos_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k3_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Let $k13_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((k4_xtuple_0 \\ & X0 = k4_xtuple_0 X1) \wedge ((k5_xtuple_0 X0 = k5_xtuple_0 X1) \wedge ((k2_xtuple_0 \\ & X0 = k2_xtuple_0 X1) \wedge ((X1 \in k3_zfmisc_1 X2 X3 X4) \wedge (X0 \in k3_zfmisc_1 \\ & X2 X3 X4)))))) \Rightarrow (X0 = X1) \end{aligned} \quad (5)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v1_xboole_0 X0)\wedge(v1_compos_0 X0))\wedge(m1_subset_1 X1 X0))\Rightarrow(k2_compos_0 X0 X1 = k4_xtuple_0 X1) \quad (7)$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1)\wedge(v3_ordinal1 k4_ordinal1) \quad (8)$$

Assume the following.

$$\forall X0.\neg v1_xboole_0 (k13_finseq_1 X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0)\wedge((\neg v1_xboole_0 X1)\wedge(\neg v1_xboole_0 X2)))\Rightarrow(\neg v1_xboole_0 (k3_zfmisc_1 X0 X1 X2)) \quad (10)$$

Assume the following.

$$\forall X0.k5_xtuple_0 X0 = k2_xtuple_0 (k1_xtuple_0 X0) \quad (11)$$

Assume the following.

$$\forall X0.k4_xtuple_0 X0 = k1_xtuple_0 (k1_xtuple_0 X0) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k3_zfmisc_1 X0 X1 X2 = k2_zfmisc_1 (k2_zfmisc_1 X0 X1) X2 \quad (13)$$

Assume the following.

$$\forall X0.(v1_compos_0 X0)\Leftrightarrow(\exists X1.(\neg v1_xboole_0 X1)\wedge(r1_tarSKI X0 (k3_zfmisc_1 k5_numbers (k13_finseq_1 k5_numbers) (k13_finseq_1 X1)))) \quad (14)$$

Theorem 1

$$\forall X0.((\neg v1_xboole_0 X0)\wedge(v1_compos_0 X0))\Rightarrow(\forall X1.(m1_subset_1 X1 X0)\Rightarrow(\forall X2.(m1_subset_1 X2 X0)\Rightarrow(((k2_compos_0 X0 X1 = k2_compos_0 X0 X2)\wedge((k5_xtuple_0 X1 = k5_xtuple_0 X2)\wedge(k2_xtuple_0 X1 = k2_xtuple_0 X2))\Rightarrow(X1 = X2))))))$$