

t13_taxonom2
(TMWSR5HdVft7o9V6zPdX4NJCiNKY1CNinrE)

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Let $v3_abian : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_taxonom2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_taxonom2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_eqrel_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_setfam_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

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

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0))) \Rightarrow ((v3_abian X1 (k1_zfmisc_1 (k1_zfmisc_1 X0))) \Leftrightarrow (k5_setfam_1 X0 X1 = X0)) \quad (4)$$

Assume the following.

$$m1_eqrel_1 k1_xboole_0 k1_xboole_0 \quad (5)$$

Assume the following.

$$\forall X0. (\neg v1_xboole_0 X0) \Rightarrow (m1_eqrel_1 (k1_tarski X0) X0) \quad (6)$$

Assume the following.

$$\forall X0. r1_tarski k1_xboole_0 X0 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1)\Rightarrow((v1_xboole_0 X1)\vee (X0 \in X1)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarski X0 X0 \quad (9)$$

Assume the following.

$$\forall X0.\exists X1.m1_subset_1 X1 X0 \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(m1_taxonom2 X1 X0)\Rightarrow(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0))) \quad (11)$$

Assume the following.

$$\begin{aligned} &\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0)))\Rightarrow((v7_taxonom2 X1 X0)\Leftrightarrow(\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 X0)))\Rightarrow(\neg(X2 \in X1)\wedge(\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 X0))\Rightarrow(\neg(r1_tarski X2 X3)\wedge((X3 \in X1)\wedge(\forall X4.(m1_subset_1 X4 (k1_zfmisc_1 X0))\Rightarrow((r1_tarski X3 X4)\wedge(X4 \in X1))\Rightarrow(X4 = X0)))))))))) \end{aligned} \quad (12)$$

Assume the following.

$$\begin{aligned} &\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0)))\Rightarrow((m1_eqrel_1 X1 X0)\Leftrightarrow((k5_setfam_1 X0 X1 = X0)\wedge(\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 X0))\Rightarrow((X2 \in X1)\Rightarrow((X2\neq k1_xboole_0)\wedge(\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 X0))\Rightarrow(\neg(X3 \in X1)\wedge((X2\neq X3)\wedge(\neg r1_xboole_0 X2 X3)))))))))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow (X2 \in X1)) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow (X2 = X0)) \quad (15)$$

Theorem 1

$$\begin{aligned} &\forall X0.\forall X1.((v3_abian X1 (k1_zfmisc_1 (k1_zfmisc_1 X0)))\wedge(m1_taxonom2 X1 X0))\Rightarrow(\neg(v7_taxonom2 X1 X0)\wedge(\forall X2.(m1_eqrel_1 X2 X0)\Rightarrow(\neg r1_tarski X2 X1))) \end{aligned}$$