

t96_scmyciel
(TMUYu7DQNTKHScjmrucC3dwtpSBYPnvBFW)

October 27, 2020

Let $v4_scmyciel : \iota \Rightarrow o$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12_scmyciel : \iota \Rightarrow \iota$ be given. Let $k1_scmyciel : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v4_scmyciel X0) \Rightarrow (\forall X1.(X1 \in k1_scmyciel (k12_scmyciel \\ X0)) \Leftrightarrow (\neg(\neg X1 \in k1_scmyciel X0) \wedge ((\forall X2.(m1_subset_1 X2 (k3_tarski \\ X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (k3_tarski X0)) \Rightarrow (\neg(X1 = k2_tarski \\ X2 (k4_tarski X3 (k3_tarski X0))) \wedge (k2_tarski X2 X3 \in k1_scmyciel \\ X0)))) \wedge (\forall X2.(m1_subset_1 X2 (k3_tarski X0)) \Rightarrow (\neg(X1 = k2_tarski \\ (k3_tarski X0) (k4_tarski X2 (k3_tarski X0)))) \wedge (X2 \in k3_tarski X0)))))) \end{aligned} \quad (1)$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.k2_tarski X0 X1 = k2_xboole_0 (k1_tarski X0) (k1_tarski X1) \quad (3)$$

Assume the following.

$$\forall X0.m1_subset_1 (k1_scmyciel X0) (k1_zfmisc_1 X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.k4_tarski X0 X1 = k2_tarski (k2_tarski X0 X1) (k1_tarski X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow ((X1 = k1_scmyciel X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow ((X2 \in X0) \wedge (k1_card_1 X2 = np_2)))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.k2_tarski\ X0\ X1 = k2_tarski\ X1\ X0 \quad (7)$$

Theorem 1

$$\forall X0.(v4_scmyciel\ X0)\Rightarrow(\forall X1.(X1 \in k3_tarski\ X0)\Rightarrow(k2_tarski\ (k4_tarski\ X1\ (k3_tarski\ X0))\ (k3_tarski\ X0) \in k12_scmyciel\ X0))$$