

t24_yellow_1 (TMN-
sYGfT6W2Y1bBZPxbhgydNpEa5LQbdQNkS)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $k4_yellow_0 : \iota \Rightarrow \iota$ be given. Let $k2_yellow_1 : \iota \Rightarrow \iota$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_tarSKI : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_setfam_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_setfam_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_yellow_1 : \iota \Rightarrow \iota$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

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

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (r1_tarSKI X0 (k3_tarSKI X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0))) \Rightarrow ((m1_setfam_1 X1 X0) \Leftrightarrow (k5_setfam_1 X0 X1 = X0)) \quad (3)$$

Assume the following.

$$\forall X0. (\neg v1_xboole_0 X0) \Rightarrow ((k3_tarSKI X0 \in X0) \Rightarrow (k4_yellow_0 (k2_yellow_1 X0) = k3_tarSKI X0)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0))) \Rightarrow (k5_setfam_1 X0 X1 = k3_tarSKI X1) \quad (5)$$

Assume the following.

$$\forall X0. (l1_pre_topc X0) \Rightarrow (m1_subset_1 (u1_pre_topc X0) (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X0)))) \quad (6)$$

Assume the following.

$$\forall X0.k2_yellow_1 X0 = g1_orders_2 X0 (k1_yellow_1 X0) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc X0) \Rightarrow ((v2_pre_topc X0) \Leftrightarrow ((u1_struct_0 \\ X0 \in u1_pre_topc X0) \wedge ((\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow ((r1_tarski X1 (u1_pre_topc \\ X0)) \Rightarrow (k5_setfam_1 (u1_struct_0 X0) X1 \in u1_pre_topc X0))) \wedge (\forall X1. \\ (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (((X1 \in u1_pre_topc \\ X0) \wedge (X2 \in u1_pre_topc X0)) \Rightarrow (k9_subset_1 (u1_struct_0 X0) X1 X2 \in \\ u1_pre_topc X0)))))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(m1_setfam_1 X1 X0) \Leftrightarrow (r1_tarski X0 (k3_tarski X1)) \quad (9)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \Rightarrow (k4_yellow_0 (k2_yellow_1 (u1_pre_topc X0)) = u1_struct_0 X0)$$