

t16_yellow_8

(TMVHFR4ATfcZYKGRnhFJNFRUK8bkt1Af8Jw)

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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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_yellow_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1 \\ (u1_struct_0\ X0))) \Rightarrow (\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1 \\ (u1_struct_0\ X0))) \Rightarrow (((v4_pre_topc\ X1\ X0) \wedge (r1_tarski\ X2\ X1)) \Rightarrow \\ (r1_tarski\ (k2_pre_topc\ X0\ X2)\ X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski\ (k1_tarski\ X0)\ X1) \Leftrightarrow (X0 \in X1) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0\ X0) \wedge (m1_subset_1\ X1\ X0)) \Rightarrow \\ (k6_domain_1\ X0\ X1 = k1_tarski\ X1) \quad (3)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0\ X0) \wedge (l1_struct_0\ X0)) \Rightarrow (\neg v1_xboole_0 \\ (u1_struct_0\ X0)) \quad (4)$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0) \Rightarrow (l1_struct_0\ X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0\ X0) \wedge (m1_subset_1\ X1\ X0)) \Rightarrow \\ (m1_subset_1\ (k6_domain_1\ X0\ X1)\ (k1_zfmisc_1\ X0)) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r1_yellow_8 \\ & X0 X1 X2) \Leftrightarrow ((X2 \in X1) \wedge (r1_tarski X1 (k2_pre_topc X0 (k6_domain_1 \\ & (u1_struct_0 X0) X2))))))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. (X0 = X1) \Leftrightarrow ((r1_tarski X0 X1) \wedge (r1_tarski X1 X0)) \quad (8)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0))) \Rightarrow ((v4_pre_topc X1 X0) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\ & X0)) \Rightarrow ((r1_yellow_8 X0 X1 X2) \Rightarrow (X1 = k2_pre_topc X0 (k6_domain_1 \\ & (u1_struct_0 X0) X2))))))) \end{aligned}$$