

t14_yellow13
(TMYZt1eBoqJzX6MSFcKLdvw8VyqThKiyN3H)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_tdlat_3 : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_yellow_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_tops_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ 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.

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

Assume the following.

$$\forall X0. ((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow ((v2_tdlat_3 X0) \Leftrightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow (\neg(v3_pre_topc X1 X0) \wedge ((X1 \neq k1_xboole_0) \wedge (X1 \neq u1_struct_0 X0)))) \quad (5)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. ((v1_tops_2 X2 X0) \wedge ((v1_yellow_8 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k1_zfmisc_1 (u1_struct_0 X0)))))) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow ((X3 \in X2) \Rightarrow ((v3_pre_topc X3 X0) \wedge (X1 \in X3)))))) \quad (6)$$

Assume the following.

$$v1_xboole_0 \ k1_xboole_0 \quad (7)$$

Assume the following.

$$\forall X0.\exists X1.m1_subset_1 \ X1 \ X0 \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski \ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((\neg v2_struct_0 \ X0) \wedge ((v2_pre_topc \ X0) \wedge \\ & (l1_pre_topc \ X0))) \wedge (m1_subset_1 \ X1 \ (u1_struct_0 \ X0))) \Rightarrow (\forall X2. \\ & (m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k1_zfmisc_1 \ (u1_struct_0 \ X0)))) \Rightarrow \\ & (((v1_tops_2 \ X2 \ X0) \wedge (v1_yellow_8 \ X2 \ X0 \ X1)) \Rightarrow ((\neg v1_xboole_0 \ X2) \wedge \\ & ((v1_tops_2 \ X2 \ X0) \wedge (v1_yellow_8 \ X2 \ X0 \ X1)))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.(l1_pre_topc \ X0) \Rightarrow ((v2_tdlat_3 \ X0) \Rightarrow (v2_pre_topc \ X0)) \quad (11)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 \ X0) \wedge ((v2_tdlat_3 \ X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 \ X1 \ (u1_struct_0 \ X0)) \Rightarrow (\forall X2. \\ & ((v1_yellow_8 \ X2 \ X0 \ X1) \wedge ((v1_tops_2 \ X2 \ X0) \wedge (m1_subset_1 \ X2 \ (k1_zfmisc_1 \\ & (k1_zfmisc_1 \ (u1_struct_0 \ X0)))))) \Rightarrow (X2 = k1_tarski \ (u1_struct_0 \\ & X0)))) \end{aligned}$$