

l7_tsp_1
(TMXkjQErFtNEjHtgA7g8AA7fKQzfBAXgebE)

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Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v2_tdlat_3 : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $v6_pre_topc : \iota \Rightarrow o$ 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 $v2_pre_topc : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ 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.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow ((v2_tdlat_3 \\ X0) \Leftrightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\ (\neg (v3_pre_topc X1 X0) \wedge ((X1 \neq k1_xboole_0) \wedge (X1 \neq u1_struct_0 X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \exists X1. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \wedge (v1_xboole_0 X1) \quad (5)$$

Assume the following.

$$\forall X0. (l1_pre_topc X0) \Rightarrow (l1_struct_0 X0) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_pre_topc\ X0) \Rightarrow ((v6_pre_topc\ X0) \Leftrightarrow ((v2_struct_0 \\ X0) \vee (\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ X0)) \Rightarrow (\forall X2. \\ (m1_subset_1\ X2\ (u1_struct_0\ X0)) \Rightarrow (\neg(X1 \neq X2) \wedge ((\forall X3.(m1_subset_1 \\ X3\ (k1_zfmisc_1\ (u1_struct_0\ X0)) \Rightarrow (\neg(v3_pre_topc\ X3\ X0) \wedge ((X1 \in \\ X3) \wedge (\neg X2 \in X3)))) \wedge (\forall X3.(m1_subset_1\ X3\ (k1_zfmisc_1\ (u1_struct_0 \\ X0)) \Rightarrow (\neg(v3_pre_topc\ X3\ X0) \wedge ((\neg X1 \in X3) \wedge (X2 \in X3))))))))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(l1_struct_0\ X0) \Rightarrow ((v7_struct_0\ X0) \Leftrightarrow (\forall X1.(\\ m1_subset_1\ X1\ (u1_struct_0\ X0)) \Rightarrow (\forall X2.(m1_subset_1\ X2 \\ (u1_struct_0\ X0)) \Rightarrow (X1 = X2)))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0) \Rightarrow ((v2_tdlat_3\ X0) \Rightarrow (v2_pre_topc\ X0)) \quad (9)$$

Assume the following.

$$\forall X0.(l1_struct_0\ X0) \Rightarrow ((\neg v7_struct_0\ X0) \Rightarrow (\neg v2_struct_0\ X0)) \quad (10)$$

Theorem 1

$$\forall X0.((\neg v7_struct_0\ X0) \wedge ((v2_tdlat_3\ X0) \wedge (l1_pre_topc\ X0))) \Rightarrow (\neg v6_pre_topc\ X0)$$