

t44_tex_4 (TM-
FjWEDneHKVPw3wfp cz3wTTjAmgVEbRaD6)

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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 $v1_tex_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_tops_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X0 X1) \wedge ((r1_tarski X0 X2) \wedge (r1_xboole_0 X1 X2))) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v2_pre_topc X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((v2_tops_1 \\ X1 X0) \Leftrightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 \\ X0)))) \Rightarrow (((r1_tarski X2 X1) \wedge (v3_pre_topc X2 X0)) \Rightarrow (X2 = k1_xboole_0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski X0 X0 \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. (l1_pre_topc X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 \\ (u1_struct_0 X0))) \Rightarrow ((v1_tex_4 X1 X0) \Leftrightarrow (\forall X2. (m1_subset_1 \\ X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (\neg (v3_pre_topc X2 X0) \wedge ((\neg \\ r1_xboole_0 X1 X2) \wedge (\neg r1_tarski X1 X2)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (X0 = X1) \Leftrightarrow ((r1_tarski X0 X1) \wedge (r1_tarski X1 X0)) \quad (5)$$

Theorem 1

$$\begin{aligned} \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ X0))) \Rightarrow ((v1_tex_4 X1 X0) \Rightarrow ((v3_pre_topc X1 X0) \vee (v2_tops_1 X1 X0)))) \end{aligned}$$