

t71_tex_2

(TMSSvq8W7inVT5txfLUCnHfX23diPw6DQ1G)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $v3_tdlat_3 : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $v4_tex_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v5_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_borsuk_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_pre_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge ((v3_tdlat_3 \\
 & X0) \wedge (l1_pre_topc X0)))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge ((v4_tex_2 \\
 & X1 X0) \wedge (m1_pre_topc X1 X0))) \Rightarrow (\forall X2.((v1_funct_1 X2) \wedge ((\\
 & v1_funct_2 X2 (u1_struct_0 X0) (u1_struct_0 X1)) \wedge ((v5_pre_topc \\
 & X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 \\
 & X0) (u1_struct_0 X1)))))) \Rightarrow ((v3_borsuk_1 X2 X0 X1) \Rightarrow (\forall X3. \\
 & (m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X1))) \Rightarrow (\forall X4. \\
 & (m1_subset_1 X4 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((X3 = X4) \Rightarrow (k8_relset_1 \\
 & (u1_struct_0 X0) (u1_struct_0 X1) X2 X3 = k2_pre_topc X0 X4))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \tag{2}$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\neg v1_xboole_0 (u1_struct_0 X0)) \tag{3}$$

Assume the following.

$$\forall X0. (l1_pre_topc X0) \Rightarrow (\forall X1. (m1_pre_topc X1 X0) \Rightarrow (l1_pre_topc X1)) \tag{4}$$

Assume the following.

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

Assume the following.

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

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0\ X0)\wedge((v2_pre_topc\ X0)\wedge((v3_tdlat_3 \\ & X0)\wedge(l1_pre_topc\ X0))))\Rightarrow(\forall X1.((\neg v2_struct_0\ X1)\wedge((v4_tex_2 \\ & X1\ X0)\wedge(m1_pre_topc\ X1\ X0))))\Rightarrow(\forall X2.((v1_funct_1\ X2)\wedge((\\ & v1_funct_2\ X2\ (u1_struct_0\ X0)\ (u1_struct_0\ X1))\wedge((v5_pre_topc \\ & X2\ X0\ X1)\wedge(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ (u1_struct_0 \\ & X0)\ (u1_struct_0\ X1))))))\Rightarrow((v3_borsuk_1\ X2\ X0\ X1)\Rightarrow(\forall X3. \\ & (m1_subset_1\ X3\ (u1_struct_0\ X1))\Rightarrow(\forall X4.(m1_subset_1\ X4 \\ & (u1_struct_0\ X0))\Rightarrow((X3 = X4)\Rightarrow(k8_relset_1\ (u1_struct_0\ X0)\ (u1_struct_0 \\ & X1)\ X2\ (k6_domain_1\ (u1_struct_0\ X1)\ X3) = k2_pre_topc\ X0\ (k6_domain_1 \\ & (u1_struct_0\ X0)\ X4))))))))) \end{aligned}$$