

t30_tex_2 (TMPSvD-
mGU1Td9uhbrTxUVGo8Y9qFmGfPhZo)

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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 $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v2_tex_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_tdlat_3 : \iota \Rightarrow o$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_tex_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $v2_tdlat_3 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_pre_topc X0)) \Rightarrow (\forall X1. \\ & ((\neg v2_struct_0 X1) \wedge (m1_pre_topc X1 X0)) \Rightarrow (\forall X2. (m1_subset_1 \\ & X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((X2 = u1_struct_0 X1) \Rightarrow ((v2_tex_2 \\ & X2 X0) \Leftrightarrow (v1_tdlat_3 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. k9_setfam_1 X0 = k1_zfmisc_1 X0 \tag{2}$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge \\ & (l1_pre_topc X0))) \wedge (m1_subset_1 X1 (u1_struct_0 X0))) \Rightarrow ((\neg v2_struct_0 \\ & (k1_tex_2 X0 X1)) \wedge ((v1_pre_topc (k1_tex_2 X0 X1)) \wedge ((v1_tdlat_3 \\ & (k1_tex_2 X0 X1)) \wedge (v2_tdlat_3 (k1_tex_2 X0 X1)))))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge \\ & (l1_pre_topc X0))) \wedge (m1_subset_1 X1 (u1_struct_0 X0))) \Rightarrow ((\neg v2_struct_0 \\ & (k1_tex_2 X0 X1)) \wedge ((v1_pre_topc (k1_tex_2 X0 X1)) \wedge (v2_pre_topc \\ & (k1_tex_2 X0 X1)))) \end{aligned} \tag{5}$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_struct_0 X0))\Rightarrow(\neg v1_xboole_0 (u1_struct_0 X0)) \quad (6)$$

Assume the following.

$$\forall X0.(l1_pre_topc X0)\Rightarrow(l1_struct_0 X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (m1_subset_1 (k6_domain_1 X0 X1) (k1_zfmisc_1 X0)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2_struct_0 X0)\wedge(l1_pre_topc X0))\wedge (m1_subset_1 X1 (u1_struct_0 X0)))\Rightarrow((\neg v2_struct_0 (k1_tex_2 X0 X1))\wedge((v1_pre_topc (k1_tex_2 X0 X1))\wedge(m1_pre_topc (k1_tex_2 X0 X1) X0))) \quad (9)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l1_pre_topc X0))\Rightarrow(\forall X1. (m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow(\forall X2.((\neg v2_struct_0 X2)\wedge((v1_pre_topc X2)\wedge(m1_pre_topc X2 X0)))\Rightarrow((X2 = k1_tex_2 X0 X1)\Leftrightarrow(u1_struct_0 X2 = k6_domain_1 (u1_struct_0 X0) X1)))) \quad (10)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0)\wedge((v2_pre_topc X0)\wedge(l1_pre_topc X0)))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow(v2_tex_2 (k6_domain_1 (u1_struct_0 X0) X1) X0))$$