

l39_topalg_5 (TM-
GaNNkGvTBR7rSgRnPpD18QeiDZXphbA4t)

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Let $k2_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_tex_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_borsuk_1 : \iota$ be given. Let $k18_borsuk_1 : \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k5_topmetr : \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 X0)) \Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \quad (1)$$

Assume the following.

$$k5_topmetr = k17_borsuk_1 \quad (2)$$

Assume the following.

$$m1_subset_1 k6_numbers k1_numbers \quad (3)$$

Assume the following.

$$(\neg v2_struct_0 k17_borsuk_1) \wedge ((v1_pre_topc k17_borsuk_1) \wedge (v2_pre_topc k17_borsuk_1)) \quad (4)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\neg v1_xboole_0 (u1_struct_0 X0)) \quad (5)$$

Assume the following.

$$\neg v1_xboole_0 k1_numbers \quad (6)$$

Assume the following.

$$\forall X0. (l1_pre_topc X0) \Rightarrow (\forall X1. (m1_pre_topc X1 X0) \Rightarrow (l1_pre_topc X1)) \quad (7)$$

Assume the following.

$$\forall X0.(l1_pre_topc\ X0)\Rightarrow(l1_struct_0\ X0) \quad (8)$$

Assume the following.

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

Assume the following.

$$m1_subset_1\ k18_borsuk_1\ (u1_struct_0\ k17_borsuk_1) \quad (10)$$

Assume the following.

$$l1_pre_topc\ k17_borsuk_1 \quad (11)$$

Assume the following.

$$\forall X0.(l1_struct_0\ X0)\Rightarrow(k2_struct_0\ X0 = u1_struct_0\ X0) \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0\ X0)\wedge(l1_pre_topc\ X0))\Rightarrow(\forall X1. \\ (m1_subset_1\ X1\ (u1_struct_0\ X0))\Rightarrow(\forall X2.((\neg v2_struct_0 \\ X2)\wedge((v1_pre_topc\ X2)\wedge(m1_pre_topc\ X2\ X0)))\Rightarrow((X2 = k1_tex_2\ X0 \\ X1)\Leftrightarrow(u1_struct_0\ X2 = k6_domain_1\ (u1_struct_0\ X0\ X1)))) \end{aligned} \quad (13)$$

Assume the following.

$$k18_borsuk_1 = k6_numbers \quad (14)$$

Theorem 1

$$\begin{aligned} k2_struct_0\ (k1_tex_2\ k17_borsuk_1\ k18_borsuk_1) = k6_domain_1 \\ k1_numbers\ k6_numbers \end{aligned}$$