

l83_borsuk_6

(TML7TqZkgZroaMMszfX3qEqf6YrSD1BtLEX)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_topmetr : \iota$ be given. Let $k4_borsuk_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_borsuk_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17_borsuk_1 : \iota$ 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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k8_borsuk_6 : \iota$ be given. Let $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Assume the following.

$$k5_topmetr = k17_borsuk_1 \tag{1}$$

Assume the following.

$$(\neg v2_struct_0\ k17_borsuk_1) \wedge ((v1_pre_topc\ k17_borsuk_1) \wedge (v2_pre_topc\ k17_borsuk_1)) \tag{2}$$

Assume the following.

$$(\neg v1_xboole_0\ k8_borsuk_6) \wedge (v4_pre_topc\ k8_borsuk_6\ (k2_borsuk_1\ k5_topmetr\ k5_topmetr)) \tag{3}$$

Assume the following.

$$m1_subset_1\ k8_borsuk_6\ (k1_zfmisc_1\ (u1_struct_0\ (k2_borsuk_1\ k5_topmetr\ k5_topmetr))) \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.(((\neg v2_struct_0 \\ & X0) \wedge ((v2_pre_topc\ X0) \wedge (l1_pre_topc\ X0))) \wedge (((\neg v2_struct_0\ X1) \wedge \\ & ((v2_pre_topc\ X1) \wedge (l1_pre_topc\ X1))) \wedge ((m1_subset_1\ X2\ (u1_struct_0 \\ & X0)) \wedge (m1_subset_1\ X3\ (u1_struct_0\ X1)))))) \Rightarrow (m1_subset_1\ (k4_borsuk_1 \\ & X0\ X1\ X2\ X3)\ (u1_struct_0\ (k2_borsuk_1\ X0\ X1))) \end{aligned} \tag{5}$$

Assume the following.

$$l1_pre_topc\ k17_borsuk_1 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\Rightarrow((m1_subset_1 X1 X0)\Leftrightarrow (X1 \in X0)))\wedge((v1_xboole_0 X0)\Rightarrow((m1_subset_1 X1 X0)\Leftrightarrow(v1_xboole_0 X1))) \quad (7)$$

Assume the following.

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

Theorem 1

$$\forall X0.(m1_subset_1 X0 (u1_struct_0 k5_topmetr))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 k5_topmetr))\Rightarrow(k4_borsuk_1 k5_topmetr k5_topmetr X0 X1 \in u1_struct_0 (k2_borsuk_1 k5_topmetr k5_topmetr)))$$