

t66_borsuk_6
(TMUbFSYjSVgjkKFAnDCjZsc5xgsvfYFQpF1)

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Let $k4_tarSKI : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $np_2 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k8_borsuk_6 : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_xxreal_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k17_borsuk_1 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $np_0 : \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k7_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_topmetr : \iota$ be given. 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 $k4_borsuk_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_borsuk_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\neg(\neg r1_xxreal_0 X0 X1) \wedge ((\neg v3_xxreal_0 X1) \wedge (\neg v2_xxreal_0 X0)))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (((r1_xxreal_0 k6_numbers X0) \wedge (r1_xxreal_0 X0 np_1)) \Leftrightarrow (X0 \in u1_struct_0 k17_borsuk_1)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (4)$$

Assume the following.

$$((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \quad (5)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (6)$$

Assume the following.

$$(m2_subset_1 \ np_0 \ k1_numbers \ k5_numbers) \wedge ((m1_subset_1 \ np_0 \ k5_numbers) \wedge (m1_subset_1 \ np_0 \ k1_numbers)) \quad (7)$$

Assume the following.

$$v1_xboole_0 \ np_0 \quad (8)$$

Assume the following.

$$k4_xcmplx_0 \ (k7_xcmplx_0 \ np_1 \ np_2) = k7_xcmplx_0 \ (k4_xcmplx_0 \ np_1) \ np_2 \quad (9)$$

Assume the following.

$$k4_xcmplx_0 \ np_0 = np_0 \quad (10)$$

Assume the following.

$$k3_xcmplx_0 \ (k7_xcmplx_0 \ np_1 \ np_2) \ np_2 = np_1 \quad (11)$$

Assume the following.

$$k3_xcmplx_0 \ np_1 \ (k7_xcmplx_0 \ np_1 \ np_2) = k7_xcmplx_0 \ np_1 \ np_2 \quad (12)$$

Assume the following.

$$k3_xcmplx_0 \ np_1 \ np_2 = np_2 \quad (13)$$

Assume the following.

$$k7_xcmplx_0 \ np_1 \ (k4_xcmplx_0 \ np_2) = k7_xcmplx_0 \ (k4_xcmplx_0 \ np_1) \ np_2 \quad (14)$$

Assume the following.

$$k6_xcmplx_0 \ (k4_xcmplx_0 \ np_1) \ np_1 = k4_xcmplx_0 \ np_2 \quad (15)$$

Assume the following.

$$k6_xcmplx_0 \ np_2 \ np_1 = np_1 \quad (16)$$

Assume the following.

$$k6_xcmplx_0 \ np_1 \ np_1 = np_0 \quad (17)$$

Assume the following.

$$k6_xcmplx_0\ np_0\ (k7_xcmplx_0\ (k4_xcmplx_0\ np_1)\ np_2) = k7_xcmplx_0\ np_1\ np_2 \quad (18)$$

Assume the following.

$$r1_xxreal_0\ (k7_xcmplx_0\ np_1\ np_2)\ np_1 \quad (19)$$

Assume the following.

$$\neg r1_xxreal_0\ (k7_xcmplx_0\ np_1\ np_2)\ np_0 \quad (20)$$

Assume the following.

$$r1_xxreal_0\ np_1\ np_1 \quad (21)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1\ X0\ k1_numbers)\wedge(v1_xreal_0\ X1))\Rightarrow(k9_real_1\ X0\ X1 = k6_xcmplx_0\ X0\ X1) \quad (22)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1\ X0\ k1_numbers)\wedge(v1_xreal_0\ X1))\Rightarrow(k8_real_1\ X0\ X1 = k3_xcmplx_0\ X0\ X1) \quad (23)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (24)$$

Assume the following.

$$k5_topmetr = k17_borsuk_1 \quad (25)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(((\neg v2_struct_0\ X0)\wedge((v2_pre_topc\ X0)\wedge(l1_pre_topc\ X0)))\wedge(((\neg v2_struct_0\ X1)\wedge((v2_pre_topc\ X1)\wedge(l1_pre_topc\ X1))))\wedge((m1_subset_1\ X2\ (u1_struct_0\ X0)\wedge(m1_subset_1\ X3\ (u1_struct_0\ X1))))))\Rightarrow(k4_borsuk_1\ X0\ X1\ X2\ X3 = k4_tarSKI\ X2\ X3) \quad (26)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1\ X0\ k1_numbers)\wedge(v1_xreal_0\ X1))\Rightarrow(k10_real_1\ X0\ X1 = k7_xcmplx_0\ X0\ X1) \quad (27)$$

Assume the following.

$$(\neg v2_struct_0\ k17_borsuk_1)\wedge((v1_pre_topc\ k17_borsuk_1)\wedge(v2_pre_topc\ k17_borsuk_1)) \quad (28)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0)\wedge(v1_xreal_0 X1))\Rightarrow(v1_xreal_0 (k7_xcmplx_0 X0 X1)) \quad (29)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0)\wedge(v1_xreal_0 X1))\Rightarrow(v1_xreal_0 (k6_xcmplx_0 X0 X1)) \quad (30)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow((v1_xcmplx_0 (k4_xcmplx_0 X0))\wedge(v1_xreal_0 (k4_xcmplx_0 X0))) \quad (31)$$

Assume the following.

$$\forall X0.((\neg v2_xxreal_0 X0)\wedge(v1_xreal_0 X0))\Rightarrow((v1_xcmplx_0 (k4_xcmplx_0 X0))\wedge(\neg v3_xxreal_0 (k4_xcmplx_0 X0))) \quad (32)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers)\wedge(v1_xreal_0 X1))\Rightarrow(m1_subset_1 (k8_real_1 X0 X1) k1_numbers) \quad (33)$$

Assume the following.

$$m1_subset_1 k8_borsuk_6 (k1_zfmisc_1 (u1_struct_0 (k2_borsuk_1 k5_topmetr k5_topmetr))) \quad (34)$$

Assume the following.

$$l1_pre_topc k17_borsuk_1 \quad (35)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k2_borsuk_1 k5_topmetr k5_topmetr))))\Rightarrow((X0 = k8_borsuk_6)\Leftrightarrow(\forall X1.(X1 \in X0)\Leftrightarrow(\exists X2.(m1_subset_1 X2 (u1_struct_0 k5_topmetr))\wedge(\exists X3.(m1_subset_1 X3 (u1_struct_0 k5_topmetr))\wedge((X1 = k4_borsuk_1 k5_topmetr k5_topmetr X2 X3)\wedge(r1_xxreal_0 X3 (k9_real_1 (k8_real_1 np_2 X2) np_1))))))) \quad (36)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers)\wedge(v1_xreal_0 X1))\Rightarrow(k8_real_1 X0 X1 = k8_real_1 X1 X0) \quad (37)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(v1_xxreal_0 X0) \quad (38)$$

Assume the following.

$$\forall X0.((v1_xreal_0 X0) \wedge (v2_xreal_0 X0)) \Rightarrow ((\neg v1_xboole_0 X0) \wedge ((v1_xreal_0 X0) \wedge (\neg v3_xreal_0 X0))) \quad (39)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (40)$$

Theorem 1

$$(k4_tarski (k10_real_1 np_1 np_2) k6_numbers \in k8_borsuk_6) \wedge (k4_tarski np_1 np_1 \in k8_borsuk_6))$$