

t62_borsuk_6
(TMQAs4e35Si9oT3WWnKuJK3i4hipZnf6Rg8)

October 27, 2020

Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k7_borsuk_6 : \iota$ be given. Let $np_1 : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $np_2 : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ 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 $k1_xboole_0 : \iota$ 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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_pre_topc : \iota \Rightarrow o$ be given. Let $v3_topmetr : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $k2_borsuk_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k6_xcmplx_0 X0 \ k6_numbers = X0) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (((r1_xxreal_0 \ k6_numbers X0) \wedge (r1_xxreal_0 X0 \ np_1)) \Leftrightarrow (X0 \in u1_struct_0 \ k17_borsuk_1)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k3_xcmplx_0 X0 \ k6_numbers = k6_numbers) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X0)) \Rightarrow (X0 = X1)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k4_tarski X0 X1 = k4_tarski X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (7)$$

Assume the following.

$$((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \quad (8)$$

Assume the following.

$$((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (9)$$

Assume the following.

$$k4_xcmplx_0 (k4_xcmplx_0 np_2) = np_2 \quad (10)$$

Assume the following.

$$k4_xcmplx_0 (k4_xcmplx_0 np_1) = np_1 \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers) \wedge (v1_xreal_0 X1)) \Rightarrow (k9_real_1 X0 X1 = k6_xcmplx_0 X0 X1) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers) \wedge (v1_xreal_0 X1)) \Rightarrow (k8_real_1 X0 X1 = k3_xcmplx_0 X0 X1) \quad (13)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (14)$$

Assume the following.

$$k5_topmetr = k17_borsuk_1 \quad (15)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (((\neg v2_struct_0 \\ & X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc X0))) \wedge (((\neg v2_struct_0 X1) \wedge \\ & ((v2_pre_topc X1) \wedge (l1_pre_topc X1))) \wedge ((m1_subset_1 X2 (u1_struct_0 \\ & X0)) \wedge (m1_subset_1 X3 (u1_struct_0 X1)))))) \Rightarrow (k4_borsuk_1 X0 X1 \\ & X2 X3 = k4_tarSKI X2 X3) \end{aligned} \quad (16)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\exists X1. (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0))) \wedge ((\neg v1_xboole_0 X1) \wedge (v2_compts_1 X1 X0))) \end{aligned} \quad (17)$$

Assume the following.

$$\begin{aligned} & (\neg v2_struct_0 k17_borsuk_1) \wedge ((v1_pre_topc k17_borsuk_1) \wedge (\\ & v2_pre_topc k17_borsuk_1)) \end{aligned} \quad (18)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v3_topmetr X0) \wedge (l1_struct_0 X0)) \Rightarrow (v3_membered \\ & (u1_struct_0 X0)) \end{aligned} \quad (19)$$

Assume the following.

$$\begin{aligned} & \forall X0. (v1_xreal_0 X0) \Rightarrow ((v1_xcmplx_0 (k4_xcmplx_0 X0)) \wedge \\ & (v1_xreal_0 (k4_xcmplx_0 X0))) \end{aligned} \quad (20)$$

Assume the following.

$$v3_topmetr k17_borsuk_1 \quad (21)$$

Assume the following.

$$\forall X0. (l1_pre_topc X0) \Rightarrow (l1_struct_0 X0) \quad (22)$$

Assume the following.

$$\begin{aligned} & m1_subset_1 k7_borsuk_6 (k1_zfmisc_1 (u1_struct_0 (k2_borsuk_1 \\ & k5_topmetr k5_topmetr))) \end{aligned} \quad (23)$$

Assume the following.

$$l1_pre_topc k17_borsuk_1 \quad (24)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k2_borsuk_1 \\ & k5_topmetr k5_topmetr)))) \Rightarrow ((X0 = k7_borsuk_6) \Leftrightarrow (\forall X1. (\\ & X1 \in X0) \Leftrightarrow (\exists X2. (m1_subset_1 X2 (u1_struct_0 k5_topmetr)) \wedge \\ & (\exists X3. (m1_subset_1 X3 (u1_struct_0 k5_topmetr)) \wedge ((X1 = \\ & k4_borsuk_1 k5_topmetr k5_topmetr X2 X3) \wedge ((r1_xxreal_0 (k9_real_1 \\ & np_1 (k8_real_1 np_2 X2)) X3) \wedge (r1_xxreal_0 (k9_real_1 (k8_real_1 \\ & np_2 X2) np_1) X3)))))) \end{aligned} \quad (25)$$

Assume the following.

$$\forall X0.\forall X1.k4_tarSKI X0 X1 = k2_tarSKI (k2_tarSKI X0 X1) (k1_tarSKI X0) \quad (26)$$

Assume the following.

$$\forall X0.\forall X1.k2_tarSKI X0 X1 = k2_tarSKI X1 X0 \quad (27)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \quad (28)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (29)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \quad (30)$$

Assume the following.

$$\forall X0.(v3_membered X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow (v1_xreal_0 X1)) \quad (31)$$

Theorem 1 $\forall X0.(k4_tarSKI k6_numbers X0 \in k7_borsuk_6) \Rightarrow (X0 = np_1)$.