

t58_borsuk_4

(TMVxt8MX8V5z6gwG9f7vEX8fVVNz9cueNDS)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_topmetr : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v2_measure5 : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k3_seq_4 : \iota \Rightarrow \iota$ be given. Let $k5_seq_4 : \iota \Rightarrow \iota$ be given. Let $k2_seq_4 : \iota \Rightarrow \iota$ be given. Let $k4_seq_4 : \iota \Rightarrow \iota$ be given. Let $v2_rcomp_1 : \iota \Rightarrow o$ be given. Let $v4_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_xxreal_2 : \iota \Rightarrow o$ be given. Let $v3_xxreal_2 : \iota \Rightarrow o$ 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 $v8_pre_topc : \iota \Rightarrow o$ be given. Let $v1_compts_1 : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v2_compts_1 X0 k5_topmetr) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 k5_topmetr)))))) \Rightarrow (\\ & \neg (r1_tarski X0 (k2_rcomp_1 k6_numbers np_1)) \wedge (\forall X1. (\\ & \neg v1_xboole_0 X1) \wedge ((v2_measure5 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & k1_numbers)))))) \Rightarrow (\neg (r1_tarski X0 X1) \wedge ((r1_tarski X1 (k2_rcomp_1 \\ & k6_numbers np_1)) \wedge ((k3_seq_4 X0 = k5_seq_4 X1) \wedge (k2_seq_4 X0 = \\ & k4_seq_4 X1)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (4)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0) \wedge ((v2_measure5 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (X0 = k1_rcomp_1 (k5_seq_4 X0) (k4_seq_4 X0)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (6)$$

Assume the following.

$$\forall X0. ((\neg v1_xboole_0 X0) \wedge ((v2_measure5 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (r1_xxreal_0 (k5_seq_4 X0) (k4_seq_4 X0)) \quad (7)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 k5_topmetr)))) \Rightarrow ((X0 = X1) \Rightarrow ((v2_rcomp_1 X0) \Leftrightarrow (v4_pre_topc X1 k5_topmetr))) \quad (8)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 k5_topmetr))) \Rightarrow (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 k1_numbers)) \Rightarrow ((X1 = X0) \Rightarrow ((v4_xxreal_2 X1) \wedge (v3_xxreal_2 X1)))) \quad (9)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarski X0 X1) \wedge (r1_tarski X1 X2)) \Rightarrow (r1_tarski X0 X2) \quad (10)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (((v2_rcomp_1 X0) \wedge (v3_xxreal_2 X0)) \Rightarrow ((X0 = k1_xboole_0) \vee (k5_seq_4 X0 \in X0))) \quad (11)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (((v2_rcomp_1 X0) \wedge (v4_xxreal_2 X0)) \Rightarrow ((X0 = k1_xboole_0) \vee (k4_seq_4 X0 \in X0))) \quad (12)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (13)$$

Assume the following.

$$k5_topmetr = k17_borsuk_1 \quad (14)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (k5_seq_4 X0 = k3_seq_4 X0) \quad (15)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (k4_seq_4 X0 = k2_seq_4 X0) \quad (16)$$

Assume the following.

$$(\neg v2_struct_0 k17_borsuk_1) \wedge ((v1_pre_topc k17_borsuk_1) \wedge (v2_pre_topc k17_borsuk_1)) \quad (17)$$

Assume the following.

$$(v8_pre_topc k17_borsuk_1) \wedge (v1_compts_1 k17_borsuk_1) \quad (18)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (19)$$

Assume the following.

$$l1_pre_topc k17_borsuk_1 \quad (20)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge ((v8_pre_topc X0) \wedge (l1_pre_topc X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((v2_compts_1 X1 X0) \Rightarrow (v4_pre_topc X1 X0))) \quad (21)$$

Theorem 1

$$\forall X0.((\neg v1_xboole_0 X0) \wedge ((v2_compts_1 X0 k5_topmetr) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 k5_topmetr)))))) \Rightarrow (\neg(r1_tarski X0 (k2_rcomp_1 k6_numbers np_1)) \wedge (\forall X1.(m1_subset_1 X1 (u1_struct_0 k5_topmetr)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 k5_topmetr)) \Rightarrow (\neg(r1_xxreal_0 X1 X2) \wedge ((r1_tarski X0 (k1_rcomp_1 X1 X2)) \wedge (r1_tarski (k1_rcomp_1 X1 X2) (k2_rcomp_1 k6_numbers np_1))))))))$$