

t6_borsuk_4

(TMXMQYW8pjQtE2ujdNncPbpKWrD1fcVndmd)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $r1_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k7_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. r1_tarski (k1_tarski X0) (k2_tarski X0 X1) \quad (1)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0. (m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1. (m1_subset_1 \\ X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0)))) \Rightarrow (\forall X2. \\ (m1_subset_1 X2 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\forall X3. (\\ m1_subset_1 X3 (u1_struct_0 (k15_euclid X0))) \Rightarrow (\neg (r1_topreal1 \\ (k15_euclid X0) X2 X3 X1) \wedge (k7_subset_1 (u1_struct_0 (k15_euclid \\ X0)) X1 (k2_tarski X2 X3) = k1_xboole_0)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (r1_tarski X0 X1) \Rightarrow (r1_tarski (k4_xboole_0 X2 X1) (k4_xboole_0 X2 X0)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (k7_subset_1 X0 X1 X2 = k4_xboole_0 X1 X2) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(m1_subset_1 (k7_subset_1 X0 X1 X2) (k1_zfmisc_1 X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(v1_xboole_0 X1)) \quad (9)$$

Theorem 1

$$\begin{aligned} &\forall X0.(m1_subset_1 X0 k5_numbers)\Rightarrow(\forall X1.(m1_subset_1 \\ &X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid X0))))\Rightarrow(\forall X2. \\ &(m1_subset_1 X2 (u1_struct_0 (k15_euclid X0)))\Rightarrow(\forall X3.(\\ &m1_subset_1 X3 (u1_struct_0 (k15_euclid X0)))\Rightarrow(\neg(r1_topreal1 \\ &(k15_euclid X0) X2 X3 X1)\wedge(v1_xboole_0 (k7_subset_1 (u1_struct_0 \\ &(k15_euclid X0)) X1 (k6_domain_1 (u1_struct_0 (k15_euclid X0) \\ &X2)))))))) \end{aligned}$$