

t61_borsuk_5

(TMQ3iM86jgQBYL6KuSRnJ7DsDqm4xAw9vcH)

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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 $k3_topmetr : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k1_seq_4 : \iota \Rightarrow \iota$ be given. Let $k3_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k2_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_0 : \iota$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (k6_subset_1 k1_numbers (k1_tarski X0) = k2_xboole_0 (k4_xxreal_1 k2_xxreal_0 X0) (k4_xxreal_1 X0 k1_xxreal_0)) \quad (1)$$

Assume the following.

$$u1_struct_0 k3_topmetr = k1_numbers \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1_subset_1 X1 (k1_zfmisc_1 X0)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 X0))) \Rightarrow (k4_subset_1 X0 X1 X2 = k2_xboole_0 X1 X2) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (k2_rcomp_1 X0 X1 = k4_xxreal_1 X0 X1) \quad (5)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (k1_seq_4 X0 = k1_tarski X0) \quad (6)$$

Assume the following.

$$v1_xxreal_0 \ k2_xxreal_0 \tag{7}$$

Assume the following.

$$v1_xxreal_0 \ k1_xxreal_0 \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 \ X0)\wedge(v1_xxreal_0 \ X1))\Rightarrow(m1_subset_1 \ (k2_rcomp_1 \ X0 \ X1) \ (k1_zfmisc_1 \ k1_numbers)) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0))\Rightarrow(k3_subset_1 \ X0 \ X1 = k4_xboole_0 \ X0 \ X1) \tag{10}$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0)\Rightarrow(v1_xxreal_0 \ X0) \tag{11}$$

Theorem 1

$$\forall X0.(m1_subset_1 \ X0 \ (k1_zfmisc_1 \ (u1_struct_0 \ k3_topmetr)))\Rightarrow(\forall X1.(v1_xreal_0 \ X1)\Rightarrow((X0 = k1_seq_4 \ X1)\Rightarrow(k3_subset_1 \ (u1_struct_0 \ k3_topmetr) \ X0 = k4_subset_1 \ k1_numbers \ (k2_rcomp_1 \ k2_xxreal_0 \ X1) \ (k2_rcomp_1 \ X1 \ k1_xxreal_0))))$$