

t31_borsuk_6

(TMHVTS7YsbjJtKzUf5ECSDXUFQqP6WLDgqG)

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Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k1_xboole_0 : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k1_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(l1_pre_topc X0) \Rightarrow ((v1_xboole_0 k1_xboole_0) \wedge ((v2_compts_1 k1_xboole_0 X0) \wedge (m1_subset_1 k1_xboole_0 (k1_zfmisc_1 (u1_struct_0 X0)))))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((\neg r1_xxreal_0 X1 X0) \Rightarrow (k1_xxreal_1 X1 X0 = k1_xboole_0))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (k1_rcomp_1 X0 X1 = k1_xxreal_1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \quad (4)$$

Theorem 1

$$\forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2.(v1_xreal_0 X2) \Rightarrow ((\neg r1_xxreal_0 X1 X2) \Rightarrow ((v1_xboole_0 (k1_rcomp_1 X1 X2)) \wedge ((v2_compts_1 (k1_rcomp_1 X1 X2) X0) \wedge (m1_subset_1 (k1_rcomp_1 X1 X2) (k1_zfmisc_1 (u1_struct_0 X0))))))))))$$