

t73_borsuk_5 (TMP-
PzxP23y3UVyH4JWG1PVpwYKVUqnde851)

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Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_topmetr : \iota$ 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 $k1_numbers : \iota$ be given. Let $v4_xxreal_2 : \iota \Rightarrow o$ be given. Let $v3_xxreal_2 : \iota \Rightarrow o$ be given. Let $v1_rcomp_1 : \iota \Rightarrow o$ be given. Let $v5_xxreal_2 : \iota \Rightarrow o$ be given. Let $v2_membered : \iota \Rightarrow o$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 k3_topmetr))) \Rightarrow ((X0 = \\ & X1) \Rightarrow ((v1_rcomp_1 X0) \Leftrightarrow (v2_compts_1 X1 k3_topmetr)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow ((v1_rcomp_1 X0) \Rightarrow (v5_xxreal_2 X0)) \quad (2)$$

Assume the following.

$$\forall X0.(v2_membered X0) \Rightarrow ((v5_xxreal_2 X0) \Leftrightarrow ((v3_xxreal_2 X0) \wedge (v4_xxreal_2 X0))) \quad (3)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (v3_membered X0) \quad (4)$$

Assume the following.

$$\forall X0.(v3_membered X0) \Rightarrow (v2_membered X0) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v2_compts_1 X0 k3_topmetr) \wedge (m1_subset_1 X0 (k1_zfmisc_1 \\ & (u1_struct_0 k3_topmetr)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ & k1_numbers)) \Rightarrow ((X1 = X0) \Rightarrow ((v4_xxreal_2 X1) \wedge (v3_xxreal_2 X1)))) \end{aligned}$$