

t39_borsuk_5 (TMPiWh- hurCiBh7aRcYvGhi795ZpZTETpFCA)

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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 $k1_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_topmetr : \iota$ be given. Let $v3_rcomp_1 : \iota \Rightarrow o$ be given. Let $v3_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_pcomps_1 : \iota \Rightarrow \iota$ be given. Let $k8_metric_1 : \iota$ be given. Let $l1_metric_1 : \iota \Rightarrow o$ be given. Let $k3_pcomps_1 : \iota \Rightarrow \iota$ be given. Let $u1_pre_topc : \iota \Rightarrow \iota$ be given. Let $v1_metric_1 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow ((X0 \in k2_pcomps_1 k8_metric_1) \Leftrightarrow (v3_rcomp_1 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(l1_metric_1 X0) \Rightarrow ((u1_struct_0 X0 = u1_struct_0 (k3_pcomps_1 X0)) \wedge (u1_pre_topc (k3_pcomps_1 X0) = k2_pcomps_1 X0)) \quad (2)$$

Assume the following.

$$(v1_metric_1 k8_metric_1) \wedge (l1_metric_1 k8_metric_1) \quad (3)$$

Assume the following.

$$(v2_pre_topc k3_topmetr) \wedge (l1_pre_topc k3_topmetr) \quad (4)$$

Assume the following.

$$k3_topmetr = k3_pcomps_1 k8_metric_1 \quad (5)$$

Assume the following.

$$\forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow ((v3_pre_topc X1 X0) \Leftrightarrow (X1 \in u1_pre_topc X0))) \quad (6)$$

Theorem 1

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 k3_topmetr))) \Rightarrow ((X0 = X1) \Rightarrow ((v3_rcomp_1 X0) \Leftrightarrow (v3_pre_topc X1 k3_topmetr))))$$