

l17_borsuk_2

(TMPzZnHU7mrSZrSmgisZqUmcN7Z9y7d1AeZ)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_topmetr : \iota$ be given. Let $k9_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & ((v2_xxreal_0\ np_1) \wedge (m2_subset_1\ np_1\ k1_numbers\ k5_numbers)) \wedge \\ & ((m1_subset_1\ np_1\ k5_numbers) \wedge (m1_subset_1\ np_1\ k1_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. (v1_xreal_0\ X0) \Rightarrow (((r1_xxreal_0\ k6_numbers\ X0) \wedge (r1_xxreal_0\ X0\ np_1)) \Leftrightarrow (X0 \in u1_struct_0\ k5_topmetr)) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_subset_1\ X0\ k1_numbers) \Rightarrow (((r1_xxreal_0\ k6_numbers \\ & X0) \wedge (r1_xxreal_0\ X0\ np_1)) \Rightarrow ((r1_xxreal_0\ k6_numbers\ (k9_real_1 \\ & np_1\ X0)) \wedge (r1_xxreal_0\ (k9_real_1\ np_1\ X0)\ np_1))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1\ X0\ k1_numbers) \wedge (v1_xreal_0\ X1)) \Rightarrow (m1_subset_1\ (k9_real_1\ X0\ X1)\ k1_numbers) \quad (4)$$

Assume the following.

$$\forall X0. (m1_subset_1\ X0\ k1_numbers) \Rightarrow (v1_xreal_0\ X0) \quad (5)$$

Theorem 1

$$\forall X0. (m1_subset_1\ X0\ k1_numbers) \Rightarrow ((X0 \in u1_struct_0\ k5_topmetr) \Rightarrow (k9_real_1\ np_1\ X0 \in u1_struct_0\ k5_topmetr))$$