

t43_borsuk_1 (TM-
bGHPH5usDMMGnwk7w1hiLxASLZoxUEgQf)

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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. Let $np_1 : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k17_borsuk_1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$u1_struct_0 k17_borsuk_1 = k1_rcomp_1 k6_numbers np_1 \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (5)$$

Assume the following.

$$\exists X0.(v1_xboole_0 X0) \wedge ((v1_xcmplx_0 X0) \wedge ((v1_xxreal_0 X0) \wedge (v1_xreal_0 X0))) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Leftrightarrow (X0 \in k1_numbers) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (k1_rcomp_1 \\ X0 X1 = ReplSep (toset (\lambda X2 : \iota.m1_subset_1 X2 k1_numbers)) \\ (\lambda X2 : \iota.(r1_xxreal_0 X0 X2) \wedge (r1_xxreal_0 X2 X1)) (\lambda X2 : \\ \iota.X2))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (9)$$

Theorem 1

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (((r1_xxreal_0 k6_numbers X0) \wedge (r1_xxreal_0 \\ X0 np_1)) \Leftrightarrow (X0 \in u1_struct_0 k17_borsuk_1))$$