

t9_urysohn1

(TMGF4fbXibGmXGTkSq67mCHa2RfoQcEshAf)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k13_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k1_urysohn1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k4_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k1_newton : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ 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 $np_0 : \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 k5_numbers) \Rightarrow ((r1_xxreal_0 k6_numbers X1) \Rightarrow ((r1_xxreal_0 (\\ & k13_newton np_2 X0) X1) \vee (k10_real_1 (k2_nat_1 (k4_nat_1 X1 np_2) \\ & np_1) (k13_newton np_2 (k2_nat_1 X0 np_1)) \in k7_subset_1 k1_numbers \\ & (k1_urysohn1 (k2_nat_1 X0 np_1)) (k1_urysohn1 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\neg(\neg r1_xxreal_0 X1 k6_numbers) \wedge (r1_xxreal_0 (k1_newton X1 X0) k6_numbers))) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (3)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \quad (5)$$

Assume the following.

$$(m2_subset_1\ np_0\ k1_numbers\ k5_numbers) \wedge ((m1_subset_1\ np_0\ k5_numbers) \wedge (m1_subset_1\ np_0\ k1_numbers)) \quad (6)$$

Assume the following.

$$v1_xboole_0\ np_0 \quad (7)$$

Assume the following.

$$k3_xcmplx_0\ np_0\ np_2 = np_0 \quad (8)$$

Assume the following.

$$k2_xcmplx_0\ np_0\ np_1 = np_1 \quad (9)$$

Assume the following.

$$\neg r1_xxreal_0\ np_2\ np_0 \quad (10)$$

Assume the following.

$$r1_xxreal_0\ np_0\ np_0 \quad (11)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (12)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1\ X0\ k5_numbers) \wedge (v7_ordinal1\ X1)) \Rightarrow (k4_nat_1\ X0\ X1 = k3_xcmplx_0\ X0\ X1) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1\ X0\ k5_numbers) \wedge (v7_ordinal1\ X1)) \Rightarrow (k2_nat_1\ X0\ X1 = k2_xcmplx_0\ X0\ X1) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1\ X0\ k5_numbers) \wedge (m1_subset_1\ X1\ k5_numbers)) \Rightarrow (k13_newton\ X0\ X1 = k1_newton\ X0\ X1) \quad (16)$$

Assume the following.

$$v6_membered\ k4_ordinal1 \quad (17)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k1_numbers) \Rightarrow (v1_xreal_0\ X0) \quad (18)$$

Assume the following.

$$\forall X0.(v6_membered\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ X0) \Rightarrow (v7_ordinal1\ X1)) \quad (19)$$

Theorem 1

$$\forall X0.(m1_subset_1\ X0\ k5_numbers) \Rightarrow (k10_real_1\ np_1\ (k13_newton\ np_2\ (k2_nat_1\ X0\ np_1)) \in k7_subset_1\ k1_numbers\ (k1_urysohn1\ (k2_nat_1\ X0\ np_1))\ (k1_urysohn1\ X0))$$