

t23_urysohn2
(TMT7Ktcmi434CH2VnThbDqsJfcEx9YL3vAx)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_urysohn1 : \iota \Rightarrow \iota$ be given. Let $k2_urysohn1 : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_xxreal_0 : \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (1)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (2)$$

Assume the following.

$$m1_subset_1 k2_urysohn1 (k1_zfmisc_1 k1_numbers) \quad (3)$$

Assume the following.

$$\forall X0. (v7_ordinal1 X0) \Rightarrow (m1_subset_1 (k1_urysohn1 X0) (k1_zfmisc_1 k1_numbers)) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (5)$$

Assume the following.

$$k1_xxreal_0 = k1_numbers \quad (6)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)) \Rightarrow ((X0 = k2_urysohn1) \Leftrightarrow (\forall X1. (m1_subset_1 X1 k1_numbers) \Rightarrow ((X1 \in X0) \Leftrightarrow (\exists X2. (m1_subset_1 X2 k5_numbers) \wedge (X1 \in k1_urysohn1 X2)))))) \quad (7)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \quad (8)$$

Theorem 1

$$\forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (r1_tarski (k1_urysohn1 X0) k2_urysohn1)$$