

t77_euclid

(TMdW35ESMTt4fFHgNkXZm8SnBQr7EXHKq8H)

October 27, 2020

Let $k1_euclid : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $k4_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k6_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $v1_card_1 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_algstr_0 : \iota \Rightarrow o$ be given. Let $l1_rlvect_1 : \iota \Rightarrow o$ be given. Let $l1_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v5_rltopsp1 : \iota \Rightarrow o$ be given. Let $v3_card_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. k4_finseq_2\ k6_numbers\ X0 = k6_domain_1\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ X0))\ (k6_finseq_1\ X0) \quad (1)$$

Assume the following.

$$\forall X0. (v1_xboole_0\ X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0\ X0) \wedge (m1_subset_1\ X1\ X0)) \Rightarrow (k6_domain_1\ X0\ X1 = k1_tarski\ X1) \quad (4)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (5)$$

Assume the following.

$$\forall X0.\exists X1.(m1_finseq_1 X1 X0)\wedge((v1_relat_1 X1)\wedge(v4_relat_1 X1 k5_numbers)\wedge((v5_relat_1 X1 X0)\wedge((v1_funct_1 X1)\wedge((v1_xboole_0 X1)\wedge((v1_finset_1 X1)\wedge(v1_finseq_1 X1)))))) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\exists X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\wedge((v1_xboole_0 X2)\wedge((v1_relat_1 X2)\wedge((v4_relat_1 X2 X0)\wedge(v5_relat_1 X2 X1)))) \quad (7)$$

Assume the following.

$$\forall X0.(\neg v1_finset_1 X0)\Rightarrow(\neg v1_finset_1 (k1_zfmisc_1 X0)) \quad (8)$$

Assume the following.

$$\neg v1_finset_1 k1_numbers \quad (9)$$

Assume the following.

$$\neg v1_finset_1 k4_ordinal1 \quad (10)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow((v1_xboole_0 (k1_card_1 X0))\wedge(v1_card_1 (k1_card_1 X0))) \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_finset_1 X0)\wedge(\neg v1_xboole_0 X1))\Rightarrow(\neg v1_finset_1 (k2_zfmisc_1 X1 X0)) \quad (12)$$

Assume the following.

$$\forall X0.(l2_algstr_0 X0)\Rightarrow((l2_struct_0 X0)\wedge(l1_algstr_0 X0)) \quad (13)$$

Assume the following.

$$\forall X0.(l1_rlvect_1 X0)\Rightarrow(l2_algstr_0 X0) \quad (14)$$

Assume the following.

$$\forall X0.(l1_rltopsp1 X0)\Rightarrow((l1_rlvect_1 X0)\wedge(l1_pre_topc X0)) \quad (15)$$

Assume the following.

$$\forall X0.(l2_struct_0 X0)\Rightarrow(m1_subset_1 (k4_struct_0 X0) (u1_struct_0 X0)) \quad (16)$$

Assume the following.

$$\forall X0.v1_card_1 (k1_card_1 X0) \quad (17)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow((v5_rltopsp1\ (k15_euclid\ X0))\wedge (l1_rltopsp1\ (k15_euclid\ X0))) \quad (18)$$

Assume the following.

$$\forall X0.k6_finseq_1\ X0 = k1_xboole_0 \quad (19)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(k1_euclid\ X0 = k4_finseq_2\ X0\ k1_numbers) \quad (20)$$

Assume the following.

$$\forall X0.(v3_card_1\ X0\ k1_xboole_0)\Rightarrow(v1_xboole_0\ X0) \quad (21)$$

Assume the following.

$$\forall X0.((v3_ordinal1\ X0)\wedge(v1_finset_1\ X0))\Rightarrow(v7_ordinal1\ X0) \quad (22)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ (k15_euclid\ X0)))\Rightarrow(v3_card_1\ X1\ X0)) \quad (23)$$

Assume the following.

$$\forall X0.(v1_card_1\ X0)\Rightarrow(v3_ordinal1\ X0) \quad (24)$$

Theorem 1 $k1_euclid\ k6_numbers = k1_tarski\ (k4_struct_0\ (k15_euclid\ k6_numbers))$.