

t16_euclidlp (TMMPCxAnJYxSf- sivxpMkuPvRSsaoJeTTEPv)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k1_euclid : \iota \Rightarrow \iota$ be given. Let $k7_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_finseq_2 X1 X0) \Rightarrow (\forall X2. (m2_finseq_2 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \quad (1)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0. (v7_ordinal1 X0) \Rightarrow (\forall X1. (m2_finseq_2 X1 k1_numbers \\ (k1_euclid X0)) \Rightarrow (\forall X2. (m2_finseq_2 X2 k1_numbers (k1_euclid \\ X0)) \Rightarrow (\forall X3. (m2_finseq_2 X3 k1_numbers (k1_euclid X0)) \Rightarrow \\ (k7_euclid X0 X1 (k7_euclid X0 X2 X3) = k7_euclid X0 (k7_euclid X0 \\ X1 X2) X3)))) \end{aligned} \quad (3)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v7_ordinal1 X0) \wedge ((m1_subset_1 X1 (k1_euclid X0)) \wedge (m1_subset_1 X2 (k1_euclid X0)))) \Rightarrow (m2_finseq_2 (k7_euclid X0 X1 X2) k1_numbers (k1_euclid X0)) \quad (5)$$

Assume the following.

$$\forall X0. (v7_ordinal1 X0) \Rightarrow (m1_finseq_2 (k1_euclid X0) k1_numbers) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1\ X0)\wedge((m1_subset_1\ X1\ (k1_euclid\ X0))\wedge(m1_subset_1\ X2\ (k1_euclid\ X0))))\Rightarrow(k7_euclid\ X0\ X1\ X2 = k7_euclid\ X0\ X2\ X1) \quad (7)$$

Assume the following.

$$\forall X0.(v6_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ X0)\Rightarrow(v7_ordinal1\ X1)) \quad (8)$$

Theorem 1

$$\forall X0.(m1_subset_1\ X0\ k5_numbers)\Rightarrow(\forall X1.(m2_finseq_2\ X1\ k1_numbers\ (k1_euclid\ X0))\Rightarrow(\forall X2.(m2_finseq_2\ X2\ k1_numbers\ (k1_euclid\ X0))\Rightarrow(\forall X3.(m2_finseq_2\ X3\ k1_numbers\ (k1_euclid\ X0))\Rightarrow(\forall X4.(m2_finseq_2\ X4\ k1_numbers\ (k1_euclid\ X0))\Rightarrow(k7_euclid\ X0\ (k7_euclid\ X0\ X1\ X2)\ (k7_euclid\ X0\ X3\ X4) = k7_euclid\ X0\ (k7_euclid\ X0\ X1\ X3)\ (k7_euclid\ X0\ X2\ X4))))))$$