

t55_euclidlp
(TMZif7CJerGSo4Q1r9EiBUCbZhc88sMWwRb)

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 $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_euclidlp : \iota \Rightarrow \iota$ be given. Let $v1_euclid_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_euclid_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r3_euclidlp : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r4_euclidlp : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_finseq_2 \\ & X1 k1_numbers (k1_euclid X0)) \Rightarrow (\forall X2.(m2_subset_1 X2 (k1_zfmisc_1 \\ & (k1_euclid X0)) (k1_euclidlp X0)) \Rightarrow (\neg(\neg X1 \in X2) \wedge ((v1_euclid_4 \\ & X2 X0) \wedge (\forall X3.(m2_finseq_2 X3 k1_numbers (k1_euclid X0)) \Rightarrow \\ & (\forall X4.(m2_finseq_2 X4 k1_numbers (k1_euclid X0)) \Rightarrow (\neg(X2 = \\ & k2_euclid_4 X0 X3 X4) \wedge (r4_euclidlp X0 (k8_euclid X0 X1 X3) (k8_euclid \\ & X0 X4 X3)))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_finseq_2 \\ & X1 k1_numbers (k1_euclid X0)) \Rightarrow (\forall X2.(m2_finseq_2 X2 k1_numbers \\ & (k1_euclid X0)) \Rightarrow ((r4_euclidlp X0 X1 X2) \Rightarrow (r3_euclidlp X0 X1 X2)))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_2 X1 X0) \Rightarrow (\forall X2.(m2_finseq_2 X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \tag{3}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{4}$$

Assume the following.

$$v6_membered k4_ordinal1 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v7_ordinal1\ X0)\wedge((m1_subset_1\ X1\ (k1_euclid\ X0))\wedge(m1_subset_1\ X2\ (k1_euclid\ X0))))\Rightarrow(m2_finseq_2\ (k8_euclid\ X0\ X1\ X2)\ k1_numbers\ (k1_euclid\ X0)) \quad (6)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(m1_finseq_2\ (k1_euclid\ X0)\ k1_numbers) \quad (7)$$

Assume the following.

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

Theorem 1

$$\forall X0.(m1_subset_1\ X0\ k5_numbers)\Rightarrow(\forall X1.(m2_finseq_2\ X1\ k1_numbers\ (k1_euclid\ X0))\Rightarrow(\forall X2.(m2_subset_1\ X2\ (k1_zfmisc_1\ (k1_euclid\ X0))\ (k1_euclidlp\ X0))\Rightarrow(\neg(\neg X1 \in X2)\wedge((v1_euclid_4\ X2\ X0)\wedge(\forall X3.(m2_finseq_2\ X3\ k1_numbers\ (k1_euclid\ X0))\Rightarrow(\forall X4.(m2_finseq_2\ X4\ k1_numbers\ (k1_euclid\ X0))\Rightarrow(\neg(X2 = k2_euclid_4\ X0\ X3\ X4)\wedge(r3_euclidlp\ X0\ (k8_euclid\ X0\ X1\ X3)\ (k8_euclid\ X0\ X4\ X3))))))))))$$