

t71_euclid

(TMY8zguZrbC1rQrZvVq49ZRmv2FUYaTuFUUs)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $k12_euclid : \iota \Rightarrow \iota$ be given. Let $k4_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $k30_valued_1 : \iota \Rightarrow \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_euclid : \iota \Rightarrow \iota$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k6_rvsum_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ (k15_euclid X0))) \Rightarrow (\forall X2.((v1_relat_1 X2) \wedge ((v1_funct_1 \\ X2) \wedge (v3_valued_0 X2))) \Rightarrow ((X1 = X2) \Rightarrow (k4_algstr_0 (k15_euclid X0) \\ X1 = k30_valued_1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ (k15_euclid X0))) \Rightarrow ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (k2_finseq_1 \\ X0) k1_numbers) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (k2_finseq_1 \\ X0) k1_numbers)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (u1_struct_0 (k15_euclid X0) = k1_euclid X0) \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v1_finseq_1 \\ X0) \wedge (v3_valued_0 X0)))) \Rightarrow (k12_euclid (k6_rvsum_1 X0) = k12_euclid \\ X0) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((v7_ordinal1\ X0)\wedge((m1_subset_1 \\ X1\ (u1_struct_0\ (k15_euclid\ X0)))\wedge((v1_relat_1\ X2)\wedge((v1_funct_1 \\ X2)\wedge((v1_finseq_1\ X2)\wedge(v3_valued_0\ X2))))))\Rightarrow((X1 = X2)\Rightarrow(k4_algstr_0 \\ (k15_euclid\ X0)\ X1 = k6_rvsum_1\ X2)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (u1_struct_0 \\ (k15_euclid\ X0)))\Rightarrow(v3_valued_0\ X1)) \quad (6)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (u1_struct_0 \\ (k15_euclid\ X0)))\Rightarrow(v1_finseq_1\ X1)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1 \\ (k2_zfmisc_1\ X0\ X1)))\Rightarrow(v1_relat_1\ X2) \quad (8)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (u1_struct_0 \\ (k15_euclid\ X0)))\Rightarrow(k12_euclid\ (k4_algstr_0\ (k15_euclid\ X0)\ X1) = \\ k12_euclid\ X1)) \end{aligned}$$