

l9_euclidp

(TMVJjo5SXukhhYHEcAZKEFq9PKiechKyxV9)

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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 $k12_euclid : \iota \Rightarrow \iota$ be given. Let $k8_euclid : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$k5_numbers = k4_ordinal1 \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m2_finseq_2 X1 k1_numbers \\ (k1_euclid X0)) \Rightarrow (\forall X2.(m2_finseq_2 X2 k1_numbers (k1_euclid \\ X0)) \Rightarrow (\neg(X1 \neq X2) \wedge (k12_euclid (k8_euclid X0 X1 X2) = k6_numbers)))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1) \Rightarrow (v7_ordinal1 X0) \tag{3}$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_finseq_2 \\ X1 k1_numbers (k1_euclid X0)) \Rightarrow (\forall X2.(m2_finseq_2 X2 k1_numbers \\ (k1_euclid X0)) \Rightarrow (\neg(X1 \neq X2) \wedge (k12_euclid (k8_euclid X0 X1 X2) = k6_numbers)))) \end{aligned}$$