

t73_euclid_8

(TMSG9Yd869kFhLr7xJkwVoR6rwBzHDZbCBP)

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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 $np_3 : \iota$ be given. Let $k23_rvsum_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(m2_finseq_2\ X1\ k1_numbers \\ (k1_euclid\ X0)) \Rightarrow (\forall X2.(m2_finseq_2\ X2\ k1_numbers\ (k1_euclid \\ X0)) \Rightarrow (k23_rvsum_1\ (k6_euclid\ X0\ X1)\ (k6_euclid\ X0\ X2) = k23_rvsum_1 \\ X1\ X2))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} ((v2_xxreal_0\ np_3) \wedge (m2_subset_1\ np_3\ k1_numbers\ k5_numbers)) \wedge \\ ((m1_subset_1\ np_3\ k5_numbers) \wedge (m1_subset_1\ np_3\ k1_numbers)) \end{aligned} \tag{2}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{3}$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k4_ordinal1) \Rightarrow (v7_ordinal1\ X0) \tag{4}$$

Theorem 1

$$\begin{aligned} \forall X0.(m2_finseq_2\ X0\ k1_numbers\ (k1_euclid\ np_3)) \Rightarrow (\forall X1. \\ (m2_finseq_2\ X1\ k1_numbers\ (k1_euclid\ np_3)) \Rightarrow (k23_rvsum_1\ (\\ k6_euclid\ np_3\ X0)\ (k6_euclid\ np_3\ X1) = k23_rvsum_1\ X0\ X1)) \end{aligned}$$