

t25_euclid_4

(TMV4fEXLwfrznBfPnapTdQYn8H6Cb4iUejZ)

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Let $v7_ordinal1 : \iota \Rightarrow o$ 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 $k23_rvsum_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m2_finseq_2 X1 k1_numbers \\ (k1_euclid X0)) \Rightarrow (\forall X2.(m2_finseq_2 X2 k1_numbers (k1_euclid \\ X0)) \Rightarrow (k23_rvsum_1 X1 (k6_euclid X0 X2) = k1_real_1 (k23_rvsum_1 \\ X1 X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(m2_finseq_2 X1 k1_numbers \\ (k1_euclid X0)) \Rightarrow (\forall X2.(m2_finseq_2 X2 k1_numbers (k1_euclid \\ X0)) \Rightarrow (k23_rvsum_1 (k6_euclid X0 X1) X2 = k1_real_1 (k23_rvsum_1 \\ X1 X2)))) \end{aligned} \tag{2}$$

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.

$$\forall X0.\forall X1.((v7_ordinal1 X0) \wedge (m1_subset_1 X1 (k1_euclid \\ X0))) \Rightarrow (k6_euclid X0 (k6_euclid X0 X1) = X1) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 X0) \wedge (m1_subset_1 X1 (k1_euclid \\ X0))) \Rightarrow (m2_finseq_2 (k6_euclid X0 X1) k1_numbers (k1_euclid X0)) \tag{5}$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (m1_finseq_2 (k1_euclid X0) k1_numbers) \tag{6}$$

Theorem 1

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