

t92_euclid_8

(TMJNECdUZ49w7pkmkwzuZkiVfar8uvB5cZAQ)

October 27, 2020

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 $k7_euclid_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k23_rvsum_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_euclid : \iota \Rightarrow \iota$ be given. Let $r3_euclidlp : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_euclid_8 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ 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 $k1_xboole_0 : \iota$ be given. Assume the following.

$$\forall X0.(m2_finseq_2 X0 k1_numbers (k1_euclid np_3)) \Rightarrow (k23_rvsum_1 X0 (k16_euclid np_3) = k6_numbers) \quad (1)$$

Assume the following.

$$\forall X0.(m2_finseq_2 X0 k1_numbers (k1_euclid np_3)) \Rightarrow (\forall X1.(m2_finseq_2 X1 k1_numbers (k1_euclid np_3)) \Rightarrow ((\neg r3_euclidlp np_3 X0 X1) \Rightarrow (k5_euclid_8 X0 X1 = k16_euclid np_3))) \quad (2)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_finseq_2 X1 k1_numbers (k1_euclid X0)) \Rightarrow (\forall X2.(m2_finseq_2 X2 k1_numbers (k1_euclid X0)) \Rightarrow (\neg (r3_euclidlp X0 X1 X2) \wedge (X1 = X2)))) \quad (3)$$

Assume the following.

$$((v2_xxreal_0 np_3) \wedge (m2_subset_1 np_3 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_3 k5_numbers) \wedge (m1_subset_1 np_3 k1_numbers)) \quad (4)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (5)$$

Assume the following.

$$\forall X0.(m2_finseq_2 X0 k1_numbers (k1_euclid np_3)) \Rightarrow (\forall X1.(m2_finseq_2 X1 k1_numbers (k1_euclid np_3)) \Rightarrow (\forall X2.(m2_finseq_2 X2 k1_numbers (k1_euclid np_3)) \Rightarrow (k7_euclid_8 X0 X1 X2 = k23_rvsum_1 X0 (k5_euclid_8 X1 X2)))) \quad (6)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m2_finseq_2 X0 k1_numbers (k1_euclid np_3)) \Rightarrow (\forall X1. \\ & (m2_finseq_2 X1 k1_numbers (k1_euclid np_3)) \Rightarrow (k7_euclid_8 X0 \\ & X1 X1 = k6_numbers)) \end{aligned}$$