

t22_euclid_3

(TMSaXHHrs8JqP2SfhvvUbJwGMdrx9y7dzCe)

October 27, 2020

Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k12_euclid : \iota \Rightarrow \iota$ be given. Let $k7_square_1 : \iota \Rightarrow \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_square_1 : \iota \Rightarrow \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_euclid : \iota \Rightarrow \iota$ 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 $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow ((m2_finseq_2 X0 k1_numbers (k1_euclid (k3_finseq_1 X0))) \wedge (m1_subset_1 X0 (u1_struct_0 (k15_euclid (k3_finseq_1 X0)))))) \quad (1)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (k12_euclid X0 = k7_square_1 (k7_real_1 (k5_square_1 (k17_euclid X0)) (k5_square_1 (k18_euclid X0)))) \quad (2)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (k17_euclid X0 = k1_seq_1 X0 np_1) \quad (3)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow (k18_euclid X0 = k1_seq_1 X0 np_2) \quad (4)$$

Theorem 1

$$\forall X0.(m2_finseq_1 X0 k1_numbers) \Rightarrow ((k3_finseq_1 X0 = np_2) \Rightarrow (k12_euclid X0 = k7_square_1 (k7_real_1 (k5_square_1 (k1_seq_1 X0 np_1)) (k5_square_1 (k1_seq_1 X0 np_2))))))$$