

t4_pdiff_7

(TMJU84na1TcH3zwwaxeKNedBC3hwwB5usob)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k17_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k7_nat_d : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k5_euclid : \iota \Rightarrow \iota$ be given. Let $k2_rfinseq : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 k5_numbers) \Rightarrow (k2_rfinseq k1_numbers X1 (k5_euclid X0) = k5_euclid \\ & (k7_nat_d X0 X1))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 k5_numbers) \Rightarrow ((r1_xxreal_0 X0 X1) \Rightarrow (k17_finseq_1 k1_numbers \\ & (k7_nat_d X0 np_1) (k5_euclid X1) = k5_euclid (k7_nat_d X0 np_1)))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 k5_numbers) \Rightarrow (((r1_xxreal_0 X0 X1) \Rightarrow (k17_finseq_1 k1_numbers \\ & (k7_nat_d X0 np_1) (k5_euclid X1) = k5_euclid (k7_nat_d X0 np_1))) \wedge \\ & (k2_rfinseq k1_numbers X0 (k5_euclid X1) = k5_euclid (k7_nat_d \\ & X1 X0)))) \end{aligned}$$