

t2_topreal4

(TMHLpKaaJVhXFNY1eWfEYdiig7ogNtvv3T3)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $r1_topreal4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_topreal1 : \iota \Rightarrow o$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & ((v4_topreal1 X0) \Rightarrow (r1_topreal1 (k15_euclid np_2) (k7_partfun1 \\ & (u1_struct_0 (k15_euclid np_2)) X0 np_1) (k7_partfun1 (u1_struct_0 \\ & (k15_euclid np_2)) X0 (k3_finseq_1 X0)) (k3_topreal1 np_2 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ & np_2)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid \\ & np_2))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid \\ & np_2))) \Rightarrow ((r1_topreal4 X0 X1 X2) \Leftrightarrow (\exists X3.(m2_finseq_1 X3 \\ & (u1_struct_0 (k15_euclid np_2))) \wedge ((v4_topreal1 X3) \wedge ((X0 = k3_topreal1 \\ & np_2 X3) \wedge ((X1 = k7_partfun1 (u1_struct_0 (k15_euclid np_2)) \\ & X3 np_1) \wedge (X2 = k7_partfun1 (u1_struct_0 (k15_euclid np_2)) X3 \\ & (k3_finseq_1 X3)))))))))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ & np_2)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid \\ & np_2))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 (k15_euclid \\ & np_2))) \Rightarrow ((r1_topreal4 X0 X1 X2) \Rightarrow (r1_topreal1 (k15_euclid np_2) \\ & X1 X2 X0)))) \end{aligned}$$