

t16_sprect_3 (TM-
ckx2N2mTq3dVAWZG7kaerEAov91y8BN7R)

October 27, 2020

Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k15_euclid : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_topreal1 : \iota \Rightarrow o$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_rltopsp1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $k8_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_matrix_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k5_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
& (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\
& (((v4_topreal1 X0) \wedge (k9_subset_1 (u1_struct_0 (k15_euclid np_2)) \\
& (k1_rltopsp1 (k15_euclid np_2) X1 (k7_partfun1 (u1_struct_0 \\
& (k15_euclid np_2)) X0 np_1)) (k3_topreal1 np_2 X0) = k1_tarski \\
& (k7_partfun1 (u1_struct_0 (k15_euclid np_2)) X0 np_1))) \Rightarrow ((\\
& X1 = k7_partfun1 (u1_struct_0 (k15_euclid np_2)) X0 np_1) \vee ((\\
& (k17_euclid X1 \neq k17_euclid (k7_partfun1 (u1_struct_0 (k15_euclid \\
& np_2)) X0 np_1)) \wedge (k18_euclid X1 \neq k18_euclid (k7_partfun1 (u1_struct_0 \\
& (k15_euclid np_2)) X0 np_1))) \vee ((v4_topreal1 (k8_finseq_1 (\\
& u1_struct_0 (k15_euclid np_2)) (k12_finseq_1 (u1_struct_0 (\\
& k15_euclid np_2)) X1) X0)) \wedge (m2_finseq_1 (k8_finseq_1 (u1_struct_0 \\
& (k15_euclid np_2)) (k12_finseq_1 (u1_struct_0 (k15_euclid np_2)) \\
& X1) X0) (u1_struct_0 (k15_euclid np_2))))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (k4_matrix_2 X0 X1 = k5_finseq_1 X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (k12_finseq_1 X0 X1 = k5_finseq_1 X1) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0)\Rightarrow((v1_funct_1 X1)\wedge((v1_finseq_1 X1)\wedge(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(v1_xboole_0 X0)\Rightarrow(\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 X0)))\Rightarrow(v1_xboole_0 X2)) \quad (6)$$

Assume the following.

$$\forall X0.(m1_finseq_1 X0 (u1_struct_0 (k15_euclid np_2)))\Rightarrow ((v4_topreal1 X0)\Rightarrow(\neg v1_xboole_0 X0)) \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2)))\Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 (k15_euclid np_2))))\Rightarrow \\ & (((v4_topreal1 X0)\wedge(k9_subset_1 (u1_struct_0 (k15_euclid np_2)) \\ & (k1_rltopsp1 (k15_euclid np_2) X1 (k7_partfun1 (u1_struct_0 \\ & (k15_euclid np_2)) X0 np_1)) (k3_topreal1 np_2 X0) = k1_tarski \\ & (k7_partfun1 (u1_struct_0 (k15_euclid np_2)) X0 np_1)))\Rightarrow((\\ & k7_partfun1 (u1_struct_0 (k15_euclid np_2)) X0 np_1 = X1)\vee((\\ & (k17_euclid (k7_partfun1 (u1_struct_0 (k15_euclid np_2)) X0 \\ & np_1)\neq k17_euclid X1)\wedge(k18_euclid (k7_partfun1 (u1_struct_0 \\ & (k15_euclid np_2)) X0 np_1)\neq k18_euclid X1))\vee(v4_topreal1 (\\ & k8_finseq_1 (u1_struct_0 (k15_euclid np_2)) (k4_matrix_2 (u1_struct_0 \\ & (k15_euclid np_2)) X1 X0)))))) \end{aligned}$$