

t21_sprect_2
(TMUHru2xdsK6FZGzAqFvduW1sm3zZbexeCq)

October 27, 2020

Let $v1_zfmisc_1 : \iota \Rightarrow o$ be given. 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 $r1_sprect_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_compts_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k6_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k8_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k9_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $k7_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_finset_1 X0) \Rightarrow ((v1_zfmisc_1 X0) \Leftrightarrow (\neg r1_xxreal_0 np_2 (k5_card_1 X0))) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.((\neg v1_xboole_0 X1) \wedge ((v2_compts_1 X1 (k15_euclid \\ & np_2)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 (k15_euclid \\ & np_2)))))) \Rightarrow ((X0 \in X1) \Rightarrow ((r1_xxreal_0 (k6_pscomp_1 X1) (k17_euclid \\ & X0)) \wedge ((r1_xxreal_0 (k17_euclid X0) (k8_pscomp_1 X1)) \wedge ((r1_xxreal_0 \\ & (k9_pscomp_1 X1) (k18_euclid X0)) \wedge (r1_xxreal_0 (k18_euclid X0) \\ & (k7_pscomp_1 X1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (\forall X1.(m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow (((X1 \in k4_finseq_1 \\ & X0) \wedge (r1_xxreal_0 np_2 (k3_finseq_1 X0))) \Rightarrow (k7_partfun1 (u1_struct_0 \\ & (k15_euclid np_2)) X0 X1 \in k3_topreal1 np_2 X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge \\ & ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (6)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (7)$$

Assume the following.

$$\forall X0.(v1_finset_1 X0) \Rightarrow (k5_card_1 X0 = k1_card_1 X0) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ & (k3_finseq_1 X0 = k1_card_1 X0) \end{aligned} \quad (9)$$

Assume the following.

$$v6_membered k4_ordinal1 \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_finseq_1 X0 (u1_struct_0 (k15_euclid np_2))) \Rightarrow \\ & (v2_compts_1 (k3_topreal1 np_2 X0) (k15_euclid np_2)) \end{aligned} \quad (11)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((m1_subset_1 X0 k5_numbers) \wedge ((\neg v1_zfmisc_1 \\ & X1) \wedge (m1_finseq_1 X1 (u1_struct_0 (k15_euclid X0)))) \Rightarrow (\neg v1_xboole_0 \\ & (k3_topreal1 X0 X1)) \end{aligned} \quad (12)$$

Assume the following.

$$\neg v1_xboole_0 \ k1_numbers \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 \ X1 \ X0) \Rightarrow ((v1_funct_1 \ X1) \wedge (v1_finseq_1 \ X1) \wedge (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ k5_numbers \ X0)))) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 \ X1 \ X0) \Rightarrow ((v1_relat_1 \ X1) \wedge (v1_funct_1 \ X1) \wedge (v1_finseq_1 \ X1)) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1_relat_1 \ X1) \wedge ((v5_relat_1 \ X1 \ X0) \wedge (v1_funct_1 \ X1))) \Rightarrow (m1_subset_1 \ (k7_partfun1 \ X0 \ X1 \ X2) \ X0) \quad (16)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (17)$$

Assume the following.

$$\forall X0.\forall X1.((v7_ordinal1 \ X0) \wedge (m1_finseq_1 \ X1 \ (u1_struct_0 \ (k15_euclid \ X0)))) \Rightarrow (m1_subset_1 \ (k3_topreal1 \ X0 \ X1) \ (k1_zfmisc_1 \ (u1_struct_0 \ (k15_euclid \ X0)))) \quad (18)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_finseq_1 \ X0 \ (u1_struct_0 \ (k15_euclid \ np_2))) \Rightarrow \\ & (\forall X1.(m2_finseq_1 \ X1 \ (u1_struct_0 \ (k15_euclid \ np_2))) \Rightarrow \\ & ((r1_sprect_2 \ X0 \ X1) \Leftrightarrow (\forall X2.(m1_subset_1 \ X2 \ k5_numbers) \Rightarrow \\ & ((X2 \in k4_finseq_1 \ X1) \Rightarrow ((r1_xxreal_0 \ (k6_pscomp_1 \ (k3_topreal1 \ np_2 \ X0)) \ (k17_euclid \ (k7_partfun1 \ (u1_struct_0 \ (k15_euclid \ np_2)) \ X1 \ X2))) \wedge ((r1_xxreal_0 \ (k17_euclid \ (k7_partfun1 \ (u1_struct_0 \ (k15_euclid \ np_2)) \ X1 \ X2)) \ (k8_pscomp_1 \ (k3_topreal1 \ np_2 \ X0))) \wedge ((r1_xxreal_0 \ (k9_pscomp_1 \ (k3_topreal1 \ np_2 \ X0)) \ (k18_euclid \ (k7_partfun1 \ (u1_struct_0 \ (k15_euclid \ np_2)) \ X1 \ X2))) \wedge (r1_xxreal_0 \ (k18_euclid \ (k7_partfun1 \ (u1_struct_0 \ (k15_euclid \ np_2)) \ X1 \ X2)) \ (k7_pscomp_1 \ (k3_topreal1 \ np_2 \ X0)))))))))) \end{aligned} \quad (19)$$

Assume the following.

$$\forall X0.\forall X1.(v1_xboole_0 \ X0) \Rightarrow (\forall X2.(m1_subset_1 \ X2 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ X0 \ X1))) \Rightarrow (v1_xboole_0 \ X2)) \quad (20)$$

Assume the following.

$$\forall X0.\forall X1.(m1_finseq_1 \ X1 \ X0) \Rightarrow (v5_relat_1 \ X1 \ X0) \quad (21)$$

Assume the following.

$$\forall X0.(\neg v1_zfmisc_1 X0) \Rightarrow (\neg v1_xboole_0 X0) \quad (22)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finset_1 X0))) \quad (23)$$

Assume the following.

$$\forall X0.(v6_membered X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow (v7_ordinal1 X1)) \quad (24)$$

Theorem 1

$$\forall X0.((\neg v1_zfmisc_1 X0) \wedge (m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2)))) \Rightarrow (r1_sprect_2 X0 X0)$$