

t76_sprect_2

(TMT2voMANR2bV9XFcppJK3RdRk4sDD43AFy)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v3_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_6 : \iota \Rightarrow \iota \Rightarrow o$ 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 $v1_topreal1 : \iota \Rightarrow o$ be given. Let $v2_topreal1 : \iota \Rightarrow o$ be given. Let $v1_goboard5 : \iota \Rightarrow o$ be given. Let $v2_goboard5 : \iota \Rightarrow o$ be given. Let $v1_sprect_2 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k20_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k3_topreal1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k4_finseq_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $k19_pscomp_1 : \iota \Rightarrow \iota$ be given. Let $v1_zfmisc_1 : \iota \Rightarrow o$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_membered : \iota \Rightarrow o$ be given. Let $v4_membered : \iota \Rightarrow o$ be given. Let $v5_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((\neg v3_funct_1 X0) \wedge ((v1_finseq_6 \\
 & X0 (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 X0) \wedge ((v2_topreal1 \\
 & X0) \wedge ((v1_goboard5 X0) \wedge ((v2_goboard5 X0) \wedge ((v1_sprect_2 X0) \wedge \\
 & (m2_finseq_1 X0 (u1_struct_0 (k15_euclid np_2)))))))))) \Rightarrow (\\
 & \neg (k7_partfun1 (u1_struct_0 (k15_euclid np_2)) X0 np_1 = k20_pscomp_1 \\
 & (k3_topreal1 np_2 X0)) \wedge ((k20_pscomp_1 (k3_topreal1 np_2 X0) \neq \\
 & k19_pscomp_1 (k3_topreal1 np_2 X0)) \wedge (r1_xxreal_0 (k4_finseq_4 \\
 & X0 (k19_pscomp_1 (k3_topreal1 np_2 X0))) (k4_finseq_4 X0 (k18_pscomp_1 \\
 & (k3_topreal1 np_2 X0))))))
 \end{aligned}
 \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v1_xboole_0 X0) \wedge ((\neg v3_funct_1 X0) \wedge ((v1_finseq_6 \\ X0 (u1_struct_0 (k15_euclid np_2))) \wedge ((v1_topreal1 X0) \wedge ((v2_topreal1 \\ X0) \wedge ((v1_goboard5 X0) \wedge ((v2_goboard5 X0) \wedge (m2_finseq_1 X0 (u1_struct_0 \\ (k15_euclid np_2)))))))))) \Rightarrow (k18_pscomp_1 (k3_topreal1 np_2 \\ X0) \neq k19_pscomp_1 (k3_topreal1 np_2 X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v1_zfmisc_1 X0) \wedge (m2_finseq_1 X0 (u1_struct_0 (\\ k15_euclid np_2)))) \Rightarrow (k19_pscomp_1 (k3_topreal1 np_2 X0) \in k2_relset_1 \\ (u1_struct_0 (k15_euclid np_2)) X0) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v1_zfmisc_1 X0) \wedge (m2_finseq_1 X0 (u1_struct_0 (\\ k15_euclid np_2)))) \Rightarrow (k18_pscomp_1 (k3_topreal1 np_2 X0) \in k2_relset_1 \\ (u1_struct_0 (k15_euclid np_2)) X0) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ (\forall X1.(v7_ordinal1 X1) \Rightarrow ((X1 \in k1_relset_1 k5_numbers X0) \Leftrightarrow \\ ((r1_xxreal_0 np_1 X1) \wedge (r1_xxreal_0 X1 (k3_finseq_1 X0)))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ (\forall X1.(X1 \in k10_xtuple_0 X0) \Rightarrow (k4_finseq_4 X0 X1 \in k4_finseq_1 \\ X0)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\\ (r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X0)) \Rightarrow (X0 = X1))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ (\forall X1.(X1 \in k10_xtuple_0 X0) \Rightarrow (k1_funct_1 X0 (k4_finseq_4 \\ X0 X1) = X1)) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (9)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (10)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (k4_finseq_1 X0 = k9_xtuple_0 X0) \quad (11)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v5_relat_1 X1 X0)) \Rightarrow (k2_relset_1 X0 X1 = k10_xtuple_0 X1) \quad (12)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v4_relat_1 X1 X0)) \Rightarrow (k1_relset_1 X0 X1 = k9_xtuple_0 X1) \quad (13)$$

Assume the following.

$$v6_membered\ k4_ordinal1 \quad (14)$$

Assume the following.

$$v3_membered\ k1_numbers \quad (15)$$

Assume the following.

$$\neg v1_xboole_0\ k1_numbers \quad (16)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 X2 X0 X1) \Rightarrow (m1_subset_1 X2 X0)) \quad (17)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Rightarrow ((v1_funct_1 X1) \wedge (v1_finseq_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers X0)))) \quad (18)$$

Assume the following.

$$\forall X0. \forall X1. (m1_finseq_1 X1 X0) \Rightarrow ((v1_relat_1 X1) \wedge (v1_funct_1 X1) \wedge (v1_finseq_1 X1)) \quad (19)$$

Assume the following.

$$m1_subset_1\ k5_numbers\ (k1_zfmisc_1\ k1_numbers) \quad (20)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (m1_subset_1 (k4_finseq_4 X0 X1) k5_numbers) \quad (21)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (m2_subset_1 (k3_finseq_1 X0) k1_numbers k5_numbers) \quad (22)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge ((v5_relat_1 X1 X0) \wedge (v1_funct_1 X1))) \Rightarrow (\forall X2. (X2 \in k9_xtuple_0 X1) \Rightarrow (k7_partfun1 X0 X1 X2 = k1_funct_1 X1 X2)) \quad (23)$$

Assume the following.

$$\forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m2_finseq_1 X1 X0) \Rightarrow ((v1_finseq_6 X1 X0) \Leftrightarrow (k7_partfun1 X0 X1 np_1 = k7_partfun1 X0 X1 (k3_finseq_1 X1)))) \quad (24)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (\neg v3_funct_1 X0))) \Rightarrow ((\neg v1_zfmisc_1 X0) \wedge ((v1_relat_1 X0) \wedge (v1_funct_1 X0))) \quad (25)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0)))) \quad (26)$$

Assume the following.

$$\forall X0. \forall X1. (v1_xboole_0 X0) \Rightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X1 X0))) \Rightarrow (v1_xboole_0 X2)) \quad (27)$$

Assume the following.

$$\forall X0. (v3_membered X0) \Rightarrow (v2_membered X0) \quad (28)$$

Assume the following.

$$\forall X0. \forall X1. (v1_xboole_0 X0) \Rightarrow (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_xboole_0 X2)) \quad (29)$$

Assume the following.

$$\forall X0. (v4_membered X0) \Rightarrow (v3_membered X0) \quad (30)$$

Assume the following.

$$\forall X0. \forall X1. (m1_finseq_1 X1 X0) \Rightarrow (v5_relat_1 X1 X0) \quad (31)$$

Assume the following.

$$\forall X0.(v5_membered\ X0)\Rightarrow(v4_membered\ X0) \quad (32)$$

Assume the following.

$$\forall X0.(v6_membered\ X0)\Rightarrow(v5_membered\ X0) \quad (33)$$

Assume the following.

$$\forall X0.(v6_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ X0)\Rightarrow(v7_ordinal1\ X1)) \quad (34)$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ X0)\Rightarrow(v1_xxreal_0\ X1)) \quad (35)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v1_xboole_0\ X0)\wedge((\neg v3_funct_1\ X0)\wedge((v1_finseq_6 \\ & X0\ (u1_struct_0\ (k15_euclid\ np_2))))\wedge((v1_topreal1\ X0)\wedge((v2_topreal1 \\ & X0)\wedge((v1_goboard5\ X0)\wedge((v2_goboard5\ X0)\wedge((v1_sprect_2\ X0)\wedge \\ & (m2_finseq_1\ X0\ (u1_struct_0\ (k15_euclid\ np_2))))))))))\Rightarrow(\\ & \neg(k7_partfun1\ (u1_struct_0\ (k15_euclid\ np_2))\ X0\ np_1 = k20_pscomp_1 \\ & (k3_topreal1\ np_2\ X0))\wedge(r1_xxreal_0\ (k3_finseq_1\ X0)\ (k4_finseq_4 \\ & X0\ (k18_pscomp_1\ (k3_topreal1\ np_2\ X0)))))) \end{aligned}$$