

t27_goboard6
(TMJTi1L9VnvxCKwxUKbqn5ASFPrX12idn9E)

October 27, 2020

Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ 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 $v3_relat_1 : \iota \Rightarrow o$ be given. Let $v1_matrix_1 : \iota \Rightarrow o$ be given. Let $v2_goboard1 : \iota \Rightarrow o$ be given. Let $v3_goboard1 : \iota \Rightarrow o$ be given. Let $v4_goboard1 : \iota \Rightarrow o$ be given. Let $v5_goboard1 : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k1_matrix_1 : \iota \Rightarrow \iota$ be given. Let $k1_tops_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_goboard5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k18_euclid : \iota \Rightarrow \iota$ be given. Let $k3_matrix_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k17_euclid : \iota \Rightarrow \iota$ be given. Let $k19_euclid : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k13_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $v3_membered : \iota \Rightarrow o$ 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 $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v2_membered : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((k17_euclid (k19_euclid X0 X1) = X0) \wedge (k18_euclid (k19_euclid X0 X1) = X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X0)) \Rightarrow (X0 = X1)) \quad (2)$$

Assume the following.

$$\begin{aligned}
& \forall X0.(m1_subset_1 X0 k5_numbers) \Rightarrow (\forall X1.((\neg v3_relat_1 \\
& X1) \wedge ((v1_matrix_1 X1) \wedge ((v2_goboard1 X1) \wedge ((v3_goboard1 X1) \wedge \\
& ((v4_goboard1 X1) \wedge ((v5_goboard1 X1) \wedge (m2_finseq_1 X1 (k3_finseq_2 \\
& (u1_struct_0 (k15_euclid np_2)))))))))) \Rightarrow ((r1_xxreal_0 np_1 \\
& X0) \Rightarrow ((r1_xxreal_0 (k1_matrix_1 X1) X0) \vee (k1_tops_1 (k15_euclid \\
& np_2) (k2_goboard5 X1 X0) = ReplSep2 (toset (\lambda X2 : \iota.m1_subset_1 \\
& X2 k1_numbers)) (\lambda X2 : \iota.toset (\lambda X3 : \iota.m1_subset_1 X3 \\
& k1_numbers)) (\lambda X2 : \iota.\lambda X3 : \iota.(\neg r1_xxreal_0 X3 (k18_euclid \\
& (k3_matrix_1 (u1_struct_0 (k15_euclid np_2)) X1 np_1 X0))) \wedge \\
& (\neg r1_xxreal_0 (k18_euclid (k3_matrix_1 (u1_struct_0 (k15_euclid \\
& np_2)) X1 np_1 (k2_nat_1 X0 np_1))) X3)) (\lambda X2 : \iota.\lambda X3 : \\
& \iota.k19_euclid X2 X3))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v3_relat_1 X0) \wedge ((v1_matrix_1 X0) \wedge ((v2_goboard1 \\
& X0) \wedge ((v3_goboard1 X0) \wedge ((v4_goboard1 X0) \wedge ((v5_goboard1 X0) \wedge \\
& (m2_finseq_1 X0 (k3_finseq_2 (u1_struct_0 (k15_euclid np_2)))))))))) \Rightarrow \\
& (k1_tops_1 (k15_euclid np_2) (k2_goboard5 X0 (k1_matrix_1 X0)) = \\
& ReplSep2 (toset (\lambda X1 : \iota.m1_subset_1 X1 k1_numbers)) (\lambda X1 : \\
& \iota.toset (\lambda X2 : \iota.m1_subset_1 X2 k1_numbers)) (\lambda X1 : \iota. \\
& \lambda X2 : \iota.\neg r1_xxreal_0 X2 (k18_euclid (k3_matrix_1 (u1_struct_0 \\
& (k15_euclid np_2)) X0 np_1 (k1_matrix_1 X0)))) (\lambda X1 : \iota. \\
& \lambda X2 : \iota.k19_euclid X1 X2))
\end{aligned} \tag{4}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{5}$$

Assume the following.

$$\forall X0.k3_finseq_2 X0 = k13_finseq_1 X0 \tag{6}$$

Assume the following.

$$v6_membered k4_ordinal1 \tag{7}$$

Assume the following.

$$v3_membered k1_numbers \tag{8}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.(m2_finseq_1 X1 X0) \Rightarrow ((v1_funct_1 X1) \wedge (\\
& (v1_finseq_1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k5_numbers \\
& X0))))))
\end{aligned} \tag{9}$$

Assume the following.

$$m1_subset_1\ k5_numbers\ (k1_zfmisc_1\ k1_numbers) \quad (10)$$

Assume the following.

$$\forall X0.((v1_relat_1\ X0)\wedge((v1_funct_1\ X0)\wedge((v1_finseq_1\ X0)\wedge(v1_matrix_1\ X0))))\Rightarrow(m1_subset_1\ (k1_matrix_1\ X0)\ k5_numbers) \quad (11)$$

Assume the following.

$$\forall X0.(v3_membered\ X0)\Rightarrow(v2_membered\ X0) \quad (12)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(v1_xxreal_0\ X0) \quad (13)$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ X0))\Rightarrow(v2_membered\ X1)) \quad (14)$$

Assume the following.

$$\forall X0.(m1_subset_1\ X0\ k1_numbers)\Rightarrow(v1_xxreal_0\ X0) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))\Rightarrow(v1_relat_1\ X2) \quad (16)$$

Assume the following.

$$\forall X0.(v6_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ X0)\Rightarrow(v7_ordinal1\ X1)) \quad (17)$$

Assume the following.

$$\forall X0.(v2_membered\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ X0)\Rightarrow(v1_xxreal_0\ X1)) \quad (18)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m1_subset_1\ X0\ k5_numbers)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ (k15_euclid\ np_2)))\Rightarrow(\forall X2.((\neg v3_relat_1\ X2)\wedge((v1_matrix_1\ X2)\wedge((v2_goboard1\ X2)\wedge((v3_goboard1\ X2)\wedge((v4_goboard1\ X2)\wedge((v5_goboard1\ X2)\wedge(m2_finseq_1\ X2\ (k3_finseq_2\ (u1_struct_0\ (k15_euclid\ np_2))))))))))\Rightarrow(\neg(r1_xxreal_0\ np_1\ X0)\wedge((r1_xxreal_0\ X0\ (k1_matrix_1\ X2))\wedge((X1\in k1_tops_1\ (k15_euclid\ np_2)\ (k2_goboard5\ X2\ X0))\wedge(r1_xxreal_0\ (k18_euclid\ X1)\ (k18_euclid\ (k3_matrix_1\ (u1_struct_0\ (k15_euclid\ np_2))\ X2\ np_1\ X0))))))) \end{aligned}$$