

l18_scmringi (TMJoN-
jYNtNndGQWu324zgFDHXup64hXHRKp)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_scmringi : \iota \Rightarrow \iota$ be given. Let $k4_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $np_5 : \iota$ be given. Let $k5_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k3_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k7_card_1 : \iota \Rightarrow \iota$ be given. Let $np_8 : \iota$ be given. Let $k2_scm_inst : \iota$ be given. Let $k2_finseq_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $np_2 : \iota$ be given. Let $np_3 : \iota$ be given. Let $np_4 : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $np_6 : \iota$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_7 : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k7_scmringi : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume

the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (k1_scmringi X0)) \Rightarrow (\neg(\neg(X1 \in k1_tarski (k3_xtuple_0 \\
& k6_numbers k1_xboole_0 k1_xboole_0)) \wedge (k4_xtuple_0 X1 = k6_numbers)) \wedge \\
& ((\neg(X1 \in ReplSep3 (toset (\lambda X2 : \iota.m2_subset_1 X2 k4_ordinal1 \\
& (k7_card_1 np_8))) (\lambda X2 : \iota.toset (\lambda X3 : \iota.m1_subset_1 \\
& X3 k2_scm_inst)) (\lambda X2 : \iota.\lambda X3 : \iota.toset (\lambda X4 : \iota. \\
& m1_subset_1 X4 k2_scm_inst)) (\lambda X2 : \iota.\lambda X3 : \iota.\lambda X4 : \\
& \iota.X2 \in k2_enumset1 np_1 np_2 np_3 np_4) (\lambda X2 : \iota.\lambda X3 : \\
& \iota.\lambda X4 : \iota.k3_xtuple_0 X2 k1_xboole_0 (k2_finseq_4 k2_scm_inst \\
& X3 X4))) \wedge (\neg(k4_xtuple_0 X1 \neq np_1) \wedge ((k4_xtuple_0 X1 \neq np_2) \wedge \\
& ((k4_xtuple_0 X1 \neq np_3) \wedge (k4_xtuple_0 X1 \neq np_4)))))) \wedge ((\neg(X1 \in \\
& ReplSep (toset (\lambda X2 : \iota.m1_subset_1 X2 k5_numbers)) (\lambda X2 : \\
& \iota.True) (\lambda X2 : \iota.k3_xtuple_0 np_6 (k12_finseq_1 k5_numbers \\
& X2) k1_xboole_0)) \wedge (k4_xtuple_0 X1 = np_6)) \wedge ((\neg(X1 \in ReplSep2 \\
& (toset (\lambda X2 : \iota.m1_subset_1 X2 k5_numbers)) (\lambda X2 : \iota. \\
& toset (\lambda X3 : \iota.m1_subset_1 X3 k2_scm_inst)) (\lambda X2 : \iota. \\
& \lambda X3 : \iota.True) (\lambda X2 : \iota.\lambda X3 : \iota.k3_xtuple_0 np_7 \\
& (k12_finseq_1 k5_numbers X2) (k12_finseq_1 k2_scm_inst X3)))) \wedge \\
& (k4_xtuple_0 X1 = np_7)) \wedge (\neg(X1 \in ReplSep2 (toset (\lambda X2 : \iota. \\
& m1_subset_1 X2 k2_scm_inst)) (\lambda X2 : \iota.toset (\lambda X3 : \iota. \\
& m1_subset_1 X3 (u1_struct_0 X0))) (\lambda X2 : \iota.\lambda X3 : \iota.True) \\
& (\lambda X2 : \iota.\lambda X3 : \iota.k3_xtuple_0 np_5 k1_xboole_0 (k7_scmringi \\
& X0 X2 X3))) \wedge (k4_xtuple_0 X1 = np_5)))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\neg v1_xboole_0 np_5 \tag{2}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k5_xtuple_0 (k3_xtuple_0 X0 X1 X2) = X1 \tag{4}$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (k1_scmringi X0)) \Rightarrow ((k4_xtuple_0 X1 = np_5) \Rightarrow (\\
& k5_xtuple_0 X1 = k1_xboole_0)))
\end{aligned}$$