

t1_scmringi
(TMZ89GdH59mX6tsvpbtbGY6FeZBWfU7jc2s)

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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 $v2_struct_0 : \iota \Rightarrow o$ 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 $k2_scm_inst : \iota$ be given. Let $k3_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k2_finseq_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_scmringi : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_scmringi : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k7_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $np_2 : \iota$ be given. Let $k2_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 X0) \Rightarrow \\ & (\forall X2. (m1_subset_1 X2 X0) \Rightarrow ((k7_partfun1 X0 (k2_finseq_4 \\ & X0 X1 X2) np_1 = X1) \wedge (k7_partfun1 X0 (k2_finseq_4 X0 X1 X2) np_2 = \\ & X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k2_xtuple_0 (k3_xtuple_0 X0 X1 X2) = X2 \tag{2}$$

Assume the following.

$$\neg v1_xboole_0 k2_scm_inst \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \wedge \\ & (m1_subset_1 X1 (k1_scmringi X0))) \Rightarrow (m1_subset_1 (k3_scmringi \\ & X0 X1) k2_scm_inst) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (k1_scmringi X0)) \Rightarrow ((\exists X2.(m1_subset_1 \\
& X2 k2_scm_inst) \wedge (\exists X3.(m1_subset_1 X3 k2_scm_inst) \wedge (\exists X4. \\
& (m2_subset_1 X4 k4_ordinal1 (k7_card_1 np_8)) \wedge (X1 = k3_xtuple_0 \\
& X4 k1_xboole_0 (k2_finseq_4 k2_scm_inst X2 X3)))))) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 k2_scm_inst) \Rightarrow ((X2 = k3_scmringi X0 X1) \Leftrightarrow (\exists X3. \\
& (m2_finseq_1 X3 k2_scm_inst) \wedge ((X3 = k2_xtuple_0 X1) \wedge (X2 = k7_partfun1 \\
& k2_scm_inst X3 np_2))))))
\end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (k1_scmringi X0)) \Rightarrow ((\exists X2.(m1_subset_1 \\
& X2 k2_scm_inst) \wedge (\exists X3.(m1_subset_1 X3 k2_scm_inst) \wedge (\exists X4. \\
& (m2_subset_1 X4 k4_ordinal1 (k7_card_1 np_8)) \wedge (X1 = k3_xtuple_0 \\
& X4 k1_xboole_0 (k2_finseq_4 k2_scm_inst X2 X3)))))) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 k2_scm_inst) \Rightarrow ((X2 = k2_scmringi X0 X1) \Leftrightarrow (\exists X3. \\
& (m2_finseq_1 X3 k2_scm_inst) \wedge ((X3 = k2_xtuple_0 X1) \wedge (X2 = k7_partfun1 \\
& k2_scm_inst X3 np_1))))))
\end{aligned} \tag{6}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(m2_subset_1 X0 k4_ordinal1 (k7_card_1 np_8)) \Rightarrow (\forall X1. \\
& ((\neg v2_struct_0 X1) \wedge (l1_struct_0 X1)) \Rightarrow (\forall X2.(m1_subset_1 \\
& X2 (k1_scmringi X1)) \Rightarrow (\forall X3.(m1_subset_1 X3 k2_scm_inst) \Rightarrow \\
& (\forall X4.(m1_subset_1 X4 k2_scm_inst) \Rightarrow ((X2 = k3_xtuple_0 X0 \\
& k1_xboole_0 (k2_finseq_4 k2_scm_inst X3 X4)) \Rightarrow ((k2_scmringi X1 \\
& X2 = X3) \wedge (k3_scmringi X1 X2 = X4))))))
\end{aligned}$$