

t7_unialg_2
(TMXH3H4zXGSmCx4UVE75rsqwCARt9yxdq4t)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_unialg_1 : \iota \Rightarrow o$ be given. Let $v3_unialg_1 : \iota \Rightarrow o$ be given. Let $v4_unialg_1 : \iota \Rightarrow o$ be given. Let $l1_unialg_1 : \iota \Rightarrow o$ be given. Let $m1_unialg_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $u1_unialg_1 : \iota \Rightarrow \iota$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_unialg_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $v1_unialg_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m5_margrel1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_unialg_2 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_unialg_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\neg v1_xboole_0 (u1_struct_0 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(l1_unialg_1 X0) \Rightarrow (l1_struct_0 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (&((\neg v2_struct_0 X0) \wedge ((v2_unialg_1 X0) \wedge \\ &((v3_unialg_1 X0) \wedge ((v4_unialg_1 X0) \wedge (l1_unialg_1 X0)))))) \wedge (\\ &(\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ &X0)))))) \Rightarrow (m2_finseq_1 (k3_unialg_2 X0 X1) (k4_partfun1 (k3_finseq_2 \\ &X1) X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_unialg_1 X0) \wedge ((v3_unialg_1 \\
& \quad X0) \wedge ((v4_unialg_1 X0) \wedge (l1_unialg_1 X0)))))) \Rightarrow (\forall X1.((\neg \\
& v2_struct_0 X1) \wedge ((v2_unialg_1 X1) \wedge ((v3_unialg_1 X1) \wedge ((v4_unialg_1 \\
& \quad X1) \wedge (l1_unialg_1 X1)))))) \Rightarrow ((m1_unialg_2 X1 X0) \Leftrightarrow ((m1_subset_1 \\
& \quad (u1_struct_0 X1) (k1_zfmisc_1 (u1_struct_0 X0))) \wedge (\forall X2. \\
& \quad ((\neg v1_xboole_0 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 \\
& \quad X0)))) \Rightarrow ((X2 = u1_struct_0 X1) \Rightarrow ((u1_unialg_1 X1 = k3_unialg_2 X0 \\
& \quad X2) \wedge (v1_unialg_2 X2 X0)))))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_unialg_1 X0) \wedge ((v3_unialg_1 \\
& \quad X0) \wedge ((v4_unialg_1 X0) \wedge (l1_unialg_1 X0)))))) \Rightarrow (\forall X1.((\neg \\
& v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0)))) \Rightarrow \\
& \quad (\forall X2.(m2_finseq_1 X2 (k4_partfun1 (k3_finseq_2 X1) X1)) \Rightarrow \\
& \quad ((X2 = k3_unialg_2 X0 X1) \Leftrightarrow ((k4_finseq_1 X2 = k4_finseq_1 (u1_unialg_1 \\
& \quad X0)) \wedge (\forall X3.\forall X4.(m5_margrel1 X4 (u1_struct_0 X0) \\
& \quad (k1_unialg_2 X0)) \Rightarrow ((X3 \in k4_finseq_1 X2) \wedge (X4 = k1_funct_1 (u1_unialg_1 \\
& \quad X0) X3)) \Rightarrow (k1_funct_1 X2 X3 = k2_unialg_2 X0 X1 X4)))))))))
\end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_unialg_1 X0) \wedge ((v3_unialg_1 \\
& \quad X0) \wedge ((v4_unialg_1 X0) \wedge (l1_unialg_1 X0)))))) \Rightarrow (\forall X1.((\neg \\
& v2_struct_0 X1) \wedge ((v2_unialg_1 X1) \wedge ((v3_unialg_1 X1) \wedge ((v4_unialg_1 \\
& \quad X1) \wedge (l1_unialg_1 X1)))))) \Rightarrow ((m1_unialg_2 X0 X1) \Rightarrow (k4_finseq_1 \\
& \quad (u1_unialg_1 X0) = k4_finseq_1 (u1_unialg_1 X1)))
\end{aligned}$$