

l76_group_9
(TMP6Vbu7pGwQWrJj1dNRLXN7UFqZuh1uo1C)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_group_1 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v3_group_9 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_group_9 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k18_group_9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_group_9 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_group_9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_group_9 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge ((v2_group_1 X1) \wedge \\ & (v3_group_1 X1) \wedge ((v3_group_9 X1 X0) \wedge (l1_group_9 X1 X0)))) \Rightarrow (\\ & \forall X2. (m1_group_9 X2 X0 X1) \Rightarrow (m1_group_9 (k4_group_9 X0 X1) \\ & X0 X2)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2_struct_0 X1) \wedge ((v2_group_1 X1) \wedge \\ & (v3_group_1 X1) \wedge ((v3_group_9 X1 X0) \wedge (l1_group_9 X1 X0)))) \Rightarrow (\\ & (v2_group_9 (k4_group_9 X0 X1) X0) \wedge (m1_group_9 (k4_group_9 X0 \\ & X1) X0 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarSKI X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (4)$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.((\neg v2_struct_0 X1)\wedge((v2_group_1 X1)\wedge \\
& (v3_group_1 X1)\wedge((v3_group_9 X1 X0)\wedge(l1_group_9 X1 X0))))\Rightarrow(\\
& \quad \forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X1)))\Rightarrow(\\
& \forall X3.((v2_group_9 X3 X0)\wedge(m1_group_9 X3 X0 X1))\Rightarrow((X3 = k18_group_9 \\
& X0 X1 X2)\Leftrightarrow((r1_tarski X2 (u1_struct_0 X3))\wedge(\forall X4.((v2_group_9 \\
& X4 X0)\wedge(m1_group_9 X4 X0 X1))\Rightarrow((r1_tarski X2 (u1_struct_0 X4))\Rightarrow \\
& \quad (m1_group_9 X3 X0 X4))))))
\end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned}
& \forall X0.\forall X1.((\neg v2_struct_0 X1)\wedge((v2_group_1 X1)\wedge \\
& (v3_group_1 X1)\wedge((v3_group_9 X1 X0)\wedge(l1_group_9 X1 X0))))\Rightarrow(\\
& \quad \forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X1)))\Rightarrow(\\
& (v1_xboole_0 X2)\Rightarrow(k18_group_9 X0 X1 X2 = k4_group_9 X0 X1))
\end{aligned}$$