

t106_aofa_000

(TMJv2rahULZ7ELn46dA2yRDgDXmHq2YCHUb)

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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 $v3_aofa_000 : \iota \Rightarrow o$ be given. Let $v4_aofa_000 : \iota \Rightarrow o$ be given. Let $v5_aofa_000 : \iota \Rightarrow o$ be given. Let $v6_aofa_000 : \iota \Rightarrow o$ be given. Let $l1_unialg_1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_aofa_000 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r5_aofa_000 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r6_aofa_000 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k21_aofa_000 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_unialg_1 X0) \wedge ((v3_unialg_1 \\ & X0) \wedge ((v4_unialg_1 X0) \wedge ((v3_aofa_000 X0) \wedge ((v4_aofa_000 X0) \wedge \\ & ((v5_aofa_000 X0) \wedge ((v6_aofa_000 X0) \wedge (l1_unialg_1 X0)))))))))) \Rightarrow \\ & (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ & X1)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. \\ & (m1_aofa_000 X4 X0 X1 X2) \Rightarrow (\forall X5.(r6_aofa_000 X0 X1 X2 X3 X4 \\ & X5) \Leftrightarrow (\forall X6.(m1_subset_1 X6 X1) \Rightarrow ((X6 \in X5) \Rightarrow (k4_tarski X6 X3 \in \\ & k21_aofa_000 X0 X1 X2 X4)))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_unialg_1 X0) \wedge ((v3_unialg_1 \\ & X0) \wedge ((v4_unialg_1 X0) \wedge ((v3_aofa_000 X0) \wedge ((v4_aofa_000 X0) \wedge \\ & ((v5_aofa_000 X0) \wedge ((v6_aofa_000 X0) \wedge (l1_unialg_1 X0)))))))))) \Rightarrow \\ & (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ & X1)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. \\ & (m1_aofa_000 X4 X0 X1 X2) \Rightarrow ((r5_aofa_000 X0 X1 X2 X3 X4) \Leftrightarrow (\forall X5. \\ & (m1_subset_1 X5 X1) \Rightarrow (k4_tarski X5 X3 \in k21_aofa_000 X0 X1 X2 X4)))))))))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (v2_unialg_1 X0) \wedge ((v3_unialg_1 \\ & X0) \wedge ((v4_unialg_1 X0) \wedge ((v3_aofa_000 X0) \wedge ((v4_aofa_000 X0) \wedge \\ & ((v5_aofa_000 X0) \wedge ((v6_aofa_000 X0) \wedge (l1_unialg_1 X0))))))) \Rightarrow \\ & (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ & X1) \Rightarrow (\forall X3.(m1_aofa_000 X3 X0 X1 X2) \Rightarrow (\forall X4.(m1_subset_1 \\ & X4 (u1_struct_0 X0) \Rightarrow ((r5_aofa_000 X0 X1 X2 X4 X3) \Rightarrow (\forall X5. \\ & r6_aofa_000 X0 X1 X2 X4 X3 X5))))))) \end{aligned}$$