

t27_aff_1 (TMQsLxEJwbzUXPZa-
kpUJH9cae3Ge2fMNPwV)

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Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v1_diraf : \iota \Rightarrow o$ be given. Let $l1_analoaf : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_aff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_aff_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_analoaf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_aff_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\
& X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\
& X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow (\forall X5. \\
& (m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (\forall X6.(m1_subset_1 X6 \\
& (u1_struct_0 X0)) \Rightarrow (\neg(X1 \neq X2) \wedge ((\neg(\neg(r2_analoaf X0 X1 X2 X3 X4) \wedge \\
& (r2_analoaf X0 X1 X2 X5 X6)) \wedge ((\neg(r2_analoaf X0 X1 X2 X3 X4) \wedge (r2_analoaf \\
& X0 X5 X6 X1 X2)) \wedge ((\neg(r2_analoaf X0 X3 X4 X1 X2) \wedge (r2_analoaf X0 X5 X6 \\
& X1 X2)) \wedge (\neg(r2_analoaf X0 X3 X4 X1 X2) \wedge (r2_analoaf X0 X1 X2 X5 X6)))))) \wedge \\
& (\neg r2_analoaf X0 X3 X4 X5 X6))))))))) \Rightarrow
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\
& X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\
& X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow ((X1 \in k2_aff_1 \\
& X0 X2 X3) \Rightarrow ((X2 = X3) \vee ((X4 \in k2_aff_1 X0 X2 X3) \Leftrightarrow (r2_analoaf X0 X2 X3 \\
& X1 X4))))))))) \Rightarrow
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\
& X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 \\
& (u1_struct_0 X0))) \Rightarrow (((v1_aff_1 X3 X0) \wedge ((X1 \in X3) \wedge (X2 \in X3))) \Rightarrow (\\
& (X1 = X2) \vee (X3 = k2_aff_1 X0 X1 X2)))))) \Rightarrow
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 \\ & (u1_struct_0 X0))) \Rightarrow ((r2_aff_1 X0 X1 X2 X3) \Leftrightarrow (\exists X4.(m1_subset_1 \\ & X4 (u1_struct_0 X0)) \wedge (\exists X5.(m1_subset_1 X5 (u1_struct_0 \\ & X0)) \wedge ((X4 \neq X5) \wedge ((X3 = k2_aff_1 X0 X4 X5) \wedge (r2_analoaf X0 X1 X2 X4 X5)))))))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v7_struct_0 X0) \wedge ((v1_diraf \\ & X0) \wedge (l1_analoaf X0))) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge (m1_subset_1 \\ & X2 (u1_struct_0 X0)))) \Rightarrow (k2_aff_1 X0 X1 X2 = k2_aff_1 X0 X2 X1) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow (\forall X5. \\ & (m1_subset_1 X5 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow (((X1 \in X5) \wedge \\ & (X2 \in X5) \wedge (v1_aff_1 X5 X0)) \Rightarrow ((X1 = X2) \vee ((r2_aff_1 X0 X3 X4 X5) \Leftrightarrow (\\ & r2_analoaf X0 X3 X4 X1 X2)))))))))) \end{aligned}$$