

t5_afproj (TMVahYz- mUB729sgS1B9omHq2VqEzqdbAmR7)

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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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_aff_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_aff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_aff_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r5_aff_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& ((v1_aff_4 X1 X0) \wedge (v1_aff_4 X2 X0)) \Rightarrow ((r1_aff_4 X0 X1 X2) \Leftrightarrow (\exists X3. \\
& \quad (m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X0))) \wedge (\exists X4. \\
& \quad (m1_subset_1 X4 (k1_zfmisc_1 (u1_struct_0 X0))) \wedge (\exists X5. \\
& \quad (m1_subset_1 X5 (k1_zfmisc_1 (u1_struct_0 X0))) \wedge (\exists X6. \\
& \quad (m1_subset_1 X6 (k1_zfmisc_1 (u1_struct_0 X0))) \wedge (\neg r5_aff_1 \\
& \quad X0 X3 X4) \wedge (r1_tarski X3 X1) \wedge (r1_tarski X4 X1) \wedge (r1_tarski X5 \\
& \quad X2) \wedge (r1_tarski X6 X2) \wedge ((r5_aff_1 X0 X3 X5) \vee (r5_aff_1 X0 X5 X3)) \wedge \\
& \quad ((r5_aff_1 X0 X4 X6) \vee (r5_aff_1 X0 X6 X4))))))))))))) \Rightarrow
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& ((\neg(\neg(r5_aff_1 X0 X1 X2) \wedge (r5_aff_1 X0 X2 X3)) \wedge (\neg(r5_aff_1 X0 X1 \\
& X2) \wedge (r5_aff_1 X0 X3 X2)) \wedge (\neg(r5_aff_1 X0 X2 X1) \wedge (r5_aff_1 X0 X2 \\
& X3)) \wedge (\neg(r5_aff_1 X0 X2 X1) \wedge (r5_aff_1 X0 X3 X2)))))) \Rightarrow (r5_aff_1 X0 \\
& \quad X1 X3))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& ((v1_aff_1 X1 X0) \wedge (v1_aff_4 X2 X0)) \Rightarrow ((r1_aff_4 X0 X1 X2) \Leftrightarrow (\exists X3. \\
& \quad (m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X0))) \wedge ((r1_tarski \\
& \quad X3 X2) \wedge ((r5_aff_1 X0 X1 X3) \vee (r5_aff_1 X0 X3 X1))))))
\end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. (((\neg v7_struct_0 X0) \wedge ((v1_diraf \\
& X0) \wedge (l1_analoaf X0))) \wedge ((m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\
& X0))) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0)))))) \Rightarrow ((r5_aff_1 \\
& X0 X1 X2) \Rightarrow (r5_aff_1 X0 X2 X1))
\end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X4.(m1_subset_1 X4 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& (((r1_aff_4 X0 X1 X3) \wedge ((r1_aff_4 X0 X1 X4) \wedge ((r1_aff_4 X0 X2 X3) \wedge \\
& ((r1_aff_4 X0 X2 X4) \wedge ((v1_aff_1 X1 X0) \wedge ((v1_aff_1 X2 X0) \wedge ((v1_aff_4 \\
& X3 X0) \wedge (v1_aff_4 X4 X0))))))))) \Rightarrow ((r5_aff_1 X0 X1 X2) \vee (r1_aff_4 \\
& X0 X3 X4))))))
\end{aligned}$$