

t58_aff_4

(TMF8tHejTPLrWMtsG4QEh6kstAuqTeYz85n)

October 27, 2020

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 $v1_aff_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_aff_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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.

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

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((\neg v7_struct_0 X0)\wedge((v1_diraf \\ & X0)\wedge(l1_analoaf X0))\wedge((m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0))\wedge(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))))))\Rightarrow((r5_aff_1 \\ & X0 X1 X2)\Rightarrow(r5_aff_1 X0 X2 X1)) \end{aligned} \tag{3}$$

Theorem 1

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