

t30_afproj
(TMQkQdJH6bEZFncykUuvpSTiL88cF6bt9NV)

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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 $u1_incsp_1 : \iota \Rightarrow \iota$ be given. Let $k13_afproj : \iota \Rightarrow \iota$ be given. Let $u2_incsp_1 : \iota \Rightarrow \iota$ be given. Let $v1_aff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_afproj : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $r1_incsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_aff_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_afproj : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X3.(m1_subset_1 X3 (u1_incsp_1 (k13_afproj X0))) \Rightarrow (\forall X4. \\
& \quad (m1_subset_1 X4 (u2_incsp_1 (k13_afproj X0))) \Rightarrow (((X3 = k5_afproj \\
& \quad X0 X1) \wedge ((k4_tarski X2 np_1 = X4) \wedge ((v1_aff_1 X1 X0) \wedge (v1_aff_1 X2 \\
& \quad X0)))) \Rightarrow ((r1_incsp_1 (k13_afproj X0) X3 X4) \Leftrightarrow (r1_aff_4 X0 X1 X2))))))))) \\
& \hspace{15em} (1)
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad (\forall X1.(X1 \in k7_afproj X0) \Leftrightarrow (\exists X2.(m1_subset_1 X2 (k1_zfmisc_1 \\
& \quad (u1_struct_0 X0))) \wedge ((X1 = k5_afproj X0 X2) \wedge (v1_aff_1 X2 X0)))) \\
& \hspace{15em} (2)
\end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (((v1_aff_1 X1 X0) \wedge (v1_aff_1 X2 X0)) \Rightarrow ((k5_afproj X0 X1 = k5_afproj \\
& \quad X0 X2) \Leftrightarrow (r1_aff_4 X0 X1 X2)))))) \\
& \hspace{15em} (3)
\end{aligned}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & \quad (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\ & \quad (\forall X2.(m1_subset_1 X2 (u1_incsp_1 (k13_afproj X0))) \Rightarrow (\forall X3. \\ & \quad (m1_subset_1 X3 (u2_incsp_1 (k13_afproj X0))) \Rightarrow (((v1_aff_1 X1 \\ X0) \wedge ((X2 = k5_afproj X0 X1) \wedge (X3 = k4_tarski X1 np_1))) \Rightarrow (r1_incsp_1 \\ & \quad (k13_afproj X0) X2 X3)))))) \end{aligned}$$