

t36_afproj

(TMXRNjK7uNC1P6Ueni3hnN1ujMXjRo7mdYL)

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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 $k14_afproj : \iota \Rightarrow \iota$ be given. Let $u2_incsp_1 : \iota \Rightarrow \iota$ be given. Let $k5_afproj : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_afproj : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $r1_incsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_aff_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r5_aff_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g1_incsp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1_incsp_1 : \iota \Rightarrow o$ be given. Let $u3_incsp_1 : \iota \Rightarrow \iota$ be given. Let $v1_incsp_1 : \iota \Rightarrow o$ be given. Let $k12_afproj : \iota \Rightarrow \iota$ be given. Let $k7_afproj : \iota \Rightarrow \iota$ be given. Let $k8_afproj : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (((r1_aff_4 X0 X1 X2) \wedge (r1_aff_4 X0 X2 X3)) \Rightarrow ((X2 = k1_xboole_0) \vee \\
& \quad (r1_aff_4 X0 X1 X3))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0. ((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad (\forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\neg (v1_aff_4 X1 X0) \wedge (X1 = k1_xboole_0)))
\end{aligned} \tag{2}$$

Assume the following.

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

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (((v1_aff_4 X1 X0) \wedge (v1_aff_4 X2 X0)) \Rightarrow ((k6_afproj X0 X1 = k6_afproj \\
& \quad \quad X0 X2) \Leftrightarrow (r1_aff_4 X0 X1 X2))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\
& \quad (((v1_aff_1 X1 X0) \wedge (v1_aff_1 X2 X0)) \Rightarrow ((k5_afproj X0 X1 = k5_afproj \\
& \quad \quad X0 X2) \Leftrightarrow (r5_aff_1 X0 X1 X2))))))
\end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0) \wedge \\
& ((\neg v1_xboole_0 X1) \wedge ((m1_subset_1 X2 X0) \wedge (m1_subset_1 X3 X1)))) \Rightarrow \\
& \quad (k1_domain_1 X0 X1 X2 X3 = k4_tarski X2 X3)
\end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 \\
& X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \Rightarrow (\forall X3. \\
& \quad \forall X4.\forall X5.(g1_incsp_1 X0 X1 X2 = g1_incsp_1 X3 X4 X5) \Rightarrow \\
& \quad ((X0 = X3) \wedge ((X1 = X4) \wedge (X2 = X5))))))
\end{aligned} \tag{7}$$

Assume the following.

$$\forall X0.(l1_incsp_1 X0) \Rightarrow (m1_subset_1 (u3_incsp_1 X0) (k1_zfmisc_1 (k2_zfmisc_1 (u1_incsp_1 X0) (u2_incsp_1 X0)))) \tag{8}$$

Assume the following.

$$\forall X0.(l1_incsp_1 X0) \Rightarrow (\neg v1_xboole_0 (u2_incsp_1 X0)) \tag{9}$$

Assume the following.

$$\forall X0.(l1_incsp_1 X0) \Rightarrow (\neg v1_xboole_0 (u1_incsp_1 X0)) \tag{10}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad ((v1_incsp_1 (k14_afproj X0)) \wedge (l1_incsp_1 (k14_afproj X0)))
\end{aligned} \tag{11}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\
& \quad (m1_subset_1 (k12_afproj X0) (k1_zfmisc_1 (k2_zfmisc_1 (k7_afproj \\
& \quad \quad X0) (k8_afproj X0))))
\end{aligned} \tag{12}$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1_incsp_1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_incsp_1 \\ & X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u2_incsp_1 X0)) \Rightarrow ((r1_incsp_1 \\ & X0 X1 X2) \Leftrightarrow (k1_domain_1 (u1_incsp_1 X0) (u2_incsp_1 X0) X1 X2 \in u3_incsp_1 \\ & X0)))) \end{aligned} \quad (13)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (k14_afproj X0 = g1_incsp_1 (k7_afproj X0) (k8_afproj X0) (k12_afproj \\ & X0)) \end{aligned} \quad (14)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 (k7_afproj \\ & X0) (k8_afproj X0)))) \Rightarrow ((X1 = k12_afproj X0) \Leftrightarrow (\forall X2.\forall X3. \\ & (k4_tarski X2 X3 \in X1) \Leftrightarrow (\exists X4.(m1_subset_1 X4 (k1_zfmisc_1 \\ & (u1_struct_0 X0))) \wedge (\exists X5.(m1_subset_1 X5 (k1_zfmisc_1 \\ & (u1_struct_0 X0))) \wedge ((X2 = k5_afproj X0 X4) \wedge ((X3 = k6_afproj X0 X5) \wedge \\ & ((v1_aff_1 X4 X0) \wedge ((v1_aff_4 X5 X0) \wedge (r1_aff_4 X0 X4 X5)))))))))) \end{aligned} \quad (15)$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1_incsp_1 X0) \Rightarrow ((v1_incsp_1 X0) \Rightarrow (X0 = g1_incsp_1 \\ & (u1_incsp_1 X0) (u2_incsp_1 X0) (u3_incsp_1 X0))) \end{aligned} \quad (16)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\ & (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\ & (\forall X3.(m1_subset_1 X3 (u1_incsp_1 (k14_afproj X0))) \Rightarrow (\forall X4. \\ & (m1_subset_1 X4 (u2_incsp_1 (k14_afproj X0))) \Rightarrow (((X3 = k5_afproj \\ & X0 X1) \wedge ((X4 = k6_afproj X0 X2) \wedge ((v1_aff_1 X1 X0) \wedge (v1_aff_4 X2 X0)))) \Rightarrow \\ & ((r1_incsp_1 (k14_afproj X0) X3 X4) \Leftrightarrow (r1_aff_4 X0 X1 X2)))))) \end{aligned}$$