

t21_afproj
(TMcj8Fm9qvzGs7eAMNbXUVhjsx96t863puV)

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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 $u1_incsp_1 : \iota \Rightarrow \iota$ be given. Let $k14_afproj : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k5_afproj : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_aff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k7_afproj : \iota \Rightarrow \iota$ 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 $k8_afproj : \iota \Rightarrow \iota$ be given. Let $k12_afproj : \iota \Rightarrow \iota$ be given. Let $v1_incsp_1 : \iota \Rightarrow o$ be given. Let $l1_incsp_1 : \iota \Rightarrow o$ be given. Let $u2_incsp_1 : \iota \Rightarrow \iota$ be given. Let $u3_incsp_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1. (X1 \in k7_afproj X0) \Leftrightarrow (\exists X2. (m1_subset_1 X2 (k1_zfmisc_1 \\ & (u1_struct_0 X0))) \wedge ((X1 = k5_afproj X0 X2) \wedge (v1_aff_1 X2 X0)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 \\ & X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \Rightarrow (\forall X3. \\ & \forall X4. \forall X5. (g1_incsp_1 X0 X1 X2 = g1_incsp_1 X3 X4 X5) \Rightarrow \\ & ((X0 = X3) \wedge ((X1 = X4) \wedge (X2 = X5)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. ((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow (\neg v1_xboole_0 (k8_afproj X0)) \quad (5)$$

Assume the following.

$$\forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow (\neg v1_xboole_0 (k7_afproj X0)) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow (m1_subset_1 (k12_afproj X0) (k1_zfmisc_1 (k2_zfmisc_1 (k7_afproj X0) (k8_afproj X0)))) \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \Rightarrow ((v1_incsp_1 (g1_incsp_1 X0 X1 X2)) \wedge (l1_incsp_1 (g1_incsp_1 X0 X1 X2))) \quad (8)$$

Assume the following.

$$\forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow (k14_afproj X0 = g1_incsp_1 (k7_afproj X0) (k8_afproj X0) (k12_afproj X0)) \quad (9)$$

Assume the following.

$$\forall X0. (l1_incsp_1 X0) \Rightarrow ((v1_incsp_1 X0) \Rightarrow (X0 = g1_incsp_1 (u1_incsp_1 X0) (u2_incsp_1 X0) (u3_incsp_1 X0))) \quad (10)$$

Theorem 1

$$\forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_incsp_1 (k14_afproj X0))) \Leftrightarrow (\exists X2. (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X0))) \wedge ((X1 = k5_afproj X0 X2) \wedge (v1_aff_1 X2 X0))))$$