

t24_aff_1

(TMT7DNvkQ8ca25Nrtqh5VKVvFgNrK4asuyK)

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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 $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_aff_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_aff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow ((X1 \in k2_aff_1 X0 X1 X2) \wedge (X2 \in k2_aff_1 X0 X1 \\ & X2)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 \\ & (u1_struct_0 X0)) \Rightarrow (((v1_aff_1 X3 X0) \wedge ((X1 \in X3) \wedge (X2 \in X3))) \Rightarrow (\\ & (X1 = X2) \vee (X3 = k2_aff_1 X0 X1 X2)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))) \Rightarrow \\ & ((v1_aff_1 X1 X0) \Leftrightarrow (\exists X2.(m1_subset_1 X2 (u1_struct_0 X0)) \wedge \\ & (\exists X3.(m1_subset_1 X3 (u1_struct_0 X0)) \wedge ((X2 \neq X3) \wedge (X1 = \\ & k2_aff_1 X0 X2 X3)))))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((\neg v7_struct_0 X0) \wedge ((v1_diraf \\ & X0) \wedge (l1_analoaf X0))) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge (m1_subset_1 \\ & X2 (u1_struct_0 X0)))) \Rightarrow (k2_aff_1 X0 X1 X2 = k2_aff_1 X0 X2 X1) \end{aligned} \tag{4}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 \\ & (u1_struct_0 X0))) \Rightarrow (((X3 = k2_aff_1 X0 X1 X2) \Rightarrow ((X1 = X2) \vee ((v1_aff_1 \\ & X3 X0) \wedge ((X1 \in X3) \wedge ((X2 \in X3) \wedge (X1 \neq X2)))))) \wedge ((v1_aff_1 X3 X0) \wedge \\ & (X1 \in X3) \wedge (X2 \in X3))) \Rightarrow ((X1 = X2) \vee ((X1 \neq X2) \wedge (X3 = k2_aff_1 X0 X1 X2)))))) \end{aligned}$$