

t10_afvect01

(TMSoLVgfrG3X2eTkbu75ffYnQJRP8syPczZ)

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Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v1_afvect01 : \iota \Rightarrow o$ 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 $r1_afvect01 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_analoaf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_afvect01 X0) \wedge (l1_analoaf \\
 & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
 & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
 & (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\
 & (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (((r2_analoaf \\
 & X0 X1 X2 X3 X4) \wedge ((r2_analoaf X0 X1 X2 X2 X5) \wedge ((r2_analoaf X0 X1 X3 X3 \\
 & X2) \wedge (r2_analoaf X0 X1 X4 X4 X2)))))) \Rightarrow (X1 = X5))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_afvect01 X0) \wedge (l1_analoaf \\
 & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
 & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r1_afvect01 X0 X1 X2) \Leftrightarrow (\exists X3. \\
 & (m1_subset_1 X3 (u1_struct_0 X0)) \wedge (\exists X4.(m1_subset_1 X4 \\
 & (u1_struct_0 X0)) \wedge ((X3 \neq X4) \wedge ((r2_analoaf X0 X1 X2 X3 X4) \wedge ((r2_analoaf \\
 & X0 X1 X3 X3 X2) \wedge (r2_analoaf X0 X1 X4 X4 X2))))))
 \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned}
 & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_afvect01 X0) \wedge (l1_analoaf \\
 & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
 & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
 & (u1_struct_0 X0)) \Rightarrow (((r1_afvect01 X0 X1 X2) \wedge (r2_analoaf X0 X1 X2 \\
 & X2 X3)) \Rightarrow (X1 = X3))))
 \end{aligned}$$