

t5_pasch

(TMVt8f6cqpVeMDM7Vx8zuuedLqwkr2ovhoA)

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Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v2_analoaf : \iota \Rightarrow o$ 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 $r2_diraf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r3_diraf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v2_analoaf X0) \wedge (l1_analoaf \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\ & (((r3_diraf X0 X1 X2 X3) \wedge (r2_diraf X0 X1 X2 X3 X4)) \Rightarrow ((X1 = X2) \vee (r3_diraf \\ & X0 X1 X2 X4)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v2_analoaf X0) \wedge (l1_analoaf \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\ & (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (((r3_diraf X0 \\ & X1 X2 X3) \wedge ((r3_diraf X0 X1 X2 X4) \wedge (r3_diraf X0 X1 X2 X5)) \Rightarrow ((X1 = X2) \vee \\ & (r3_diraf X0 X3 X4 X5)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v2_analoaf X0) \wedge (l1_analoaf \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r3_diraf X0 X1 X1 X2) \wedge ((r3_diraf \\ & X0 X1 X2 X2) \wedge (r3_diraf X0 X1 X2 X1)))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v2_analoaf X0) \wedge (l1_analoaf \\
& X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
& (u1_struct_0 X0)) \Rightarrow ((r3_diraf X0 X1 X2 X3) \Rightarrow ((r3_diraf X0 X1 X3 X2) \wedge \\
& ((r3_diraf X0 X2 X1 X3) \wedge ((r3_diraf X0 X2 X3 X1) \wedge ((r3_diraf X0 X3 X1 \\
& X2) \wedge (r3_diraf X0 X3 X2 X1))))))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v2_analoaf X0) \wedge (l1_analoaf \\
& X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
& (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\
& (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (\forall X6.(m1_subset_1 \\
& X6 (u1_struct_0 X0)) \Rightarrow (\neg(X1 \neq X2) \wedge ((\neg(\neg(r2_diraf X0 X1 X2 X3 X4) \wedge \\
& (r2_diraf X0 X1 X2 X5 X6)) \wedge ((\neg(r2_diraf X0 X1 X2 X3 X4) \wedge (r2_diraf \\
& X0 X5 X6 X1 X2)) \wedge ((\neg(r2_diraf X0 X3 X4 X1 X2) \wedge (r2_diraf X0 X5 X6 X1 X2)) \wedge \\
& (\neg(r2_diraf X0 X3 X4 X1 X2) \wedge (r2_diraf X0 X1 X2 X5 X6)))))) \wedge (\neg r2_diraf \\
& X0 X3 X4 X5 X6))))))))))
\end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v2_analoaf X0) \wedge (l1_analoaf \\
& X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
& (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\
& ((r2_diraf X0 X1 X2 X3 X4) \Rightarrow ((r2_diraf X0 X1 X2 X4 X3) \wedge ((r2_diraf X0 \\
& X2 X1 X3 X4) \wedge ((r2_diraf X0 X2 X1 X4 X3) \wedge ((r2_diraf X0 X3 X4 X1 X2) \wedge \\
& (r2_diraf X0 X3 X4 X2 X1) \wedge ((r2_diraf X0 X4 X3 X1 X2) \wedge (r2_diraf X0 X4 \\
& X3 X2 X1))))))))))
\end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v7_struct_0 X0) \wedge ((v2_analoaf X0) \wedge (l1_analoaf \\
& X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
& (u1_struct_0 X0)) \Rightarrow ((r2_diraf X0 X1 X2 X1 X3) \Rightarrow (r2_diraf X0 X2 X1 X2 \\
& X3))))))
\end{aligned} \tag{7}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v2_analoaf X0) \wedge (l1_analoaf \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\ & (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (((r2_diraf X0 \\ & X1 X2 X3 X4) \wedge ((r2_diraf X0 X1 X2 X3 X5) \wedge ((r2_diraf X0 X1 X3 X2 X4) \wedge (\\ & r2_diraf X0 X1 X3 X2 X5)))) \Rightarrow ((r3_diraf X0 X1 X2 X3) \vee (X4 = X5)))))))))) \end{aligned}$$