

t31_parsp_1
(TMY8t1wed3n6u9bsFj3veGVJ3c3ho5JSLgQ)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_parasp_1 : \iota \Rightarrow o$ be given. Let $l1_parasp_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r1_parasp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_parasp_1 X0) \wedge (l1_parasp_1 \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\ & (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (\forall X6.(m1_subset_1 \\ & X6 (u1_struct_0 X0)) \Rightarrow (\forall X7.(m1_subset_1 X7 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X8.(m1_subset_1 X8 (u1_struct_0 X0)) \Rightarrow (\neg(\neg r1_parasp_1 \\ & X0 X1 X2 X3 X4) \wedge ((r1_parasp_1 X0 X1 X2 X5 X6) \wedge ((r1_parasp_1 X0 X3 X4 X7 \\ & X8) \wedge ((X5 \neq X6) \wedge ((X7 \neq X8) \wedge (r1_parasp_1 X0 X5 X6 X7 X8))))))))))))) \\ & \hspace{15em} (1) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_parasp_1 X0) \wedge (l1_parasp_1 \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow ((r1_parasp_1 X0 X1 X2 X1 X3) \Rightarrow ((r1_parasp_1 X0 \\ & X1 X3 X1 X2) \wedge ((r1_parasp_1 X0 X2 X1 X1 X3) \wedge ((r1_parasp_1 X0 X1 X2 X3 X1) \wedge \\ & ((r1_parasp_1 X0 X1 X3 X2 X1) \wedge ((r1_parasp_1 X0 X2 X1 X3 X1) \wedge ((r1_parasp_1 \\ & X0 X3 X1 X1 X2) \wedge ((r1_parasp_1 X0 X3 X1 X2 X1) \wedge ((r1_parasp_1 X0 X2 X1 X2 \\ & X3) \wedge ((r1_parasp_1 X0 X1 X2 X2 X3) \wedge ((r1_parasp_1 X0 X2 X1 X3 X2) \wedge ((r1_parasp_1 \\ & X0 X2 X3 X2 X1) \wedge ((r1_parasp_1 X0 X1 X2 X3 X2) \wedge ((r1_parasp_1 X0 X3 X2 X2 \\ & X1) \wedge ((r1_parasp_1 X0 X2 X3 X1 X2) \wedge ((r1_parasp_1 X0 X3 X2 X1 X2) \wedge ((r1_parasp_1 \\ & X0 X3 X1 X3 X2) \wedge ((r1_parasp_1 X0 X1 X3 X3 X2) \wedge ((r1_parasp_1 X0 X3 X1 X2 \\ & X3) \wedge ((r1_parasp_1 X0 X1 X3 X2 X3) \wedge ((r1_parasp_1 X0 X3 X2 X3 X1) \wedge ((r1_parasp_1 \\ & X0 X2 X3 X3 X1) \wedge ((r1_parasp_1 X0 X3 X2 X1 X3) \wedge (r1_parasp_1 X0 X2 X3 X1 \\ & X3)))))))))))))))))) \\ & \hspace{15em} (2) \end{aligned}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_parsp_1 X0) \wedge (l1_parsp_1 \\
& X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
& (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\
& ((r1_parsp_1 X0 X1 X2 X3 X4) \Rightarrow ((r1_parsp_1 X0 X2 X1 X3 X4) \wedge ((r1_parsp_1 \\
& X0 X1 X2 X4 X3) \wedge ((r1_parsp_1 X0 X2 X1 X4 X3) \wedge ((r1_parsp_1 X0 X3 X4 X1 \\
& X2) \wedge ((r1_parsp_1 X0 X4 X3 X1 X2) \wedge ((r1_parsp_1 X0 X3 X4 X2 X1) \wedge (r1_parsp_1 \\
& X0 X4 X3 X2 X1))))))))))
\end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_parsp_1 X0) \wedge (l1_parsp_1 \\
& X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
& (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\
& (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\
& (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (\forall X6.(m1_subset_1 \\
& X6 (u1_struct_0 X0)) \Rightarrow (\neg(\neg r1_parsp_1 X0 X1 X2 X1 X3) \wedge ((r1_parsp_1 \\
& X0 X1 X2 X4 X5) \wedge ((r1_parsp_1 X0 X1 X3 X4 X6) \wedge ((r1_parsp_1 X0 X2 X3 X5 \\
& X6) \wedge ((X4 \neq X5) \wedge (r1_parsp_1 X0 X4 X5 X4 X6))))))))))
\end{aligned}$$