

t29_parsp_2 (TMN- vbpD2m3u2zQ9RfGmSa5nBwBStHEq7cPr)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_parasp_1 : \iota \Rightarrow o$ be given. Let $v1_parasp_2 : \iota \Rightarrow o$ 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 $r2_parasp_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_parasp_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_parasp_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_parasp_1 X0) \wedge ((v1_parasp_2 \\
& X0) \wedge (l1_parasp_1 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\
& X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\
& (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 \\
& (u1_struct_0 X0)) \Rightarrow ((r2_parasp_2 X0 X1 X2 X3 X4) \Rightarrow ((X1 \neq X2) \wedge ((X2 \neq \\
& X3) \wedge ((X3 \neq X1) \wedge ((X1 \neq X4) \wedge ((X2 \neq X4) \wedge (X3 \neq X4))))))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_parasp_1 X0) \wedge ((v1_parasp_2 \\
& X0) \wedge (l1_parasp_1 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\
& X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\
& (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 \\
& (u1_struct_0 X0)) \Rightarrow (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow \\
& (\neg(\neg r1_parasp_2 X0 X1 X2 X3) \wedge ((r1_parasp_1 X0 X1 X2 X3 X4) \wedge ((X3 \neq X4) \wedge \\
& ((r1_parasp_2 X0 X1 X2 X5) \wedge (r1_parasp_2 X0 X3 X4 X5))))))))))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_parasp_1 X0) \wedge ((v1_parasp_2 \\
& X0) \wedge (l1_parasp_1 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\
& X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\
& (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 \\
& (u1_struct_0 X0)) \Rightarrow ((r2_parasp_2 X0 X1 X2 X3 X4) \Leftrightarrow ((\neg r1_parasp_2 X0 \\
& X1 X2 X3) \wedge ((r1_parasp_1 X0 X1 X2 X3 X4) \wedge (r1_parasp_1 X0 X1 X3 X2 X4))))))
\end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_parsp_1 X0) \wedge ((v1_parsp_2 \\ & X0) \wedge (l1_parsp_1 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow \\ & (\neg(r2_parsp_2 X0 X1 X2 X3 X4) \wedge ((r1_parsp_2 X0 X1 X2 X5) \wedge (r1_parsp_2 \\ & X0 X3 X4 X5)))))))))) \end{aligned}$$