

t70_semi_af1 (TMHqoGSwkTbY- WCf13bc5ZvtAysJkPBfCswY)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_semi_af1 : \iota \Rightarrow o$ 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 $r3_semi_af1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v1_semi_af1 X0) \wedge (l1_analoaf X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
 & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 \\
 & (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\
 & ((r3_semi_af1 X0 X1 X2 X3 X4) \Rightarrow ((r3_semi_af1 X0 X3 X4 X1 X2) \wedge ((r3_semi_af1 \\
 & X0 X2 X1 X4 X3) \wedge ((r3_semi_af1 X0 X1 X3 X2 X4) \wedge ((r3_semi_af1 X0 X4 X3 \\
 & X2 X1) \wedge ((r3_semi_af1 X0 X2 X4 X1 X3) \wedge ((r3_semi_af1 X0 X3 X1 X4 X2) \wedge \\
 & (r3_semi_af1 X0 X4 X2 X3 X1))))))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v1_semi_af1 X0) \wedge (l1_analoaf X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
 & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 \\
 & (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\
 & (\forall X5. (m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (\forall X6. (m1_subset_1 \\
 & X6 (u1_struct_0 X0)) \Rightarrow (((r3_semi_af1 X0 X1 X2 X3 X4) \wedge (r3_semi_af1 \\
 & X0 X1 X2 X5 X6)) \Rightarrow (r3_semi_af1 X0 X3 X4 X5 X6))))))))))
 \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v1_semi_af1 X0) \wedge (l1_analoaf X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\
 & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 \\
 & (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow \\
 & (\forall X5. (m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (\forall X6. (m1_subset_1 \\
 & X6 (u1_struct_0 X0)) \Rightarrow (((r3_semi_af1 X0 X1 X2 X3 X4) \wedge (r3_semi_af1 \\
 & X0 X2 X5 X4 X6)) \Rightarrow (r3_semi_af1 X0 X1 X5 X3 X6))))))))))
 \end{aligned}$$