

t2_translac
(TMZHz9mcXReaFFjCs8Wa62EyoYDxkcpZVGP)

October 27, 2020

Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v1_diraf : \iota \Rightarrow o$ be given. Let $v2_diraf : \iota \Rightarrow o$ 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 $v1_translac : \iota \Rightarrow o$ be given. Let $r2_analoaf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_aff_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge ((v2_diraf X0) \wedge \\ (l1_analoaf X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 \\ (u1_struct_0 X0)) \Rightarrow (\neg(\neg r2_analoaf X0 X1 X2 X3 X4) \wedge (\forall X5.(\\ m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (\neg(r1_aff_1 X0 X1 X2 X5) \wedge (r1_aff_1 \\ X0 X3 X4 X5)))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ ((v1_translac X0) \Leftrightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow \\ (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 \\ X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 \\ X0)) \Rightarrow (((r2_analoaf X0 X1 X2 X3 X4) \wedge ((r2_analoaf X0 X1 X3 X2 X4) \wedge \\ r2_analoaf X0 X1 X4 X2 X3))) \Rightarrow (r1_aff_1 X0 X1 X2 X3)))))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge ((v2_diraf X0) \wedge \\ (l1_analoaf X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 \\ (u1_struct_0 X0)) \Rightarrow (\neg(v1_translac X0) \wedge ((r2_analoaf X0 X1 X2 X3 \\ X4) \wedge ((r2_analoaf X0 X1 X3 X2 X4) \wedge (\neg r1_aff_1 X0 X1 X2 X3) \wedge (\forall X5. \\ (m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow (\neg(r1_aff_1 X0 X2 X3 X5) \wedge (r1_aff_1 \\ X0 X1 X4 X5)))))))))) \end{aligned}$$