

t27_tmap_1

(TMT_{ssv}XJkWJ5TES77k_{jz}3Xum7k9LVC4dBxQ)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_pre_topc : \iota \Rightarrow o$ be given. Let $l1_pre_topc : \iota \Rightarrow o$ be given. Let $m1_pre_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tsep_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_tsep_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(l1_pre_topc X0) \Rightarrow (m1_pre_topc X0 X0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge (m1_pre_topc X1 X0)) \Rightarrow (\\ & \forall X2.((\neg v2_struct_0 X2) \wedge (m1_pre_topc X2 X0)) \Rightarrow (\forall X3. \\ & ((\neg v2_struct_0 X3) \wedge (m1_pre_topc X3 X0)) \Rightarrow (\forall X4.((\neg v2_struct_0 \\ & X4) \wedge (m1_pre_topc X4 X0)) \Rightarrow (((m1_pre_topc X1 X3) \wedge (m1_pre_topc \\ & X2 X4)) \Rightarrow ((r1_tsep_1 X1 X2) \vee (m1_pre_topc (k2_tsep_1 X0 X1 X2) (k2_tsep_1 \\ & X0 X3 X4)))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(l1_pre_topc X0) \Rightarrow (\forall X1.(m1_pre_topc X1 X0) \Rightarrow (l1_pre_topc X1)) \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_pre_topc X0) \wedge (l1_pre_topc \\ & X0))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge (m1_pre_topc X1 X0)) \Rightarrow (\\ & \forall X2.((\neg v2_struct_0 X2) \wedge (m1_pre_topc X2 X0)) \Rightarrow (\forall X3. \\ & ((\neg v2_struct_0 X3) \wedge (m1_pre_topc X3 X0)) \Rightarrow ((\neg r1_tsep_1 X1 X2) \Rightarrow \\ & (((m1_pre_topc X1 X3) \Rightarrow (m1_pre_topc (k2_tsep_1 X0 X1 X2) (k2_tsep_1 \\ & X0 X3 X2))) \wedge ((m1_pre_topc X2 X3) \Rightarrow (m1_pre_topc (k2_tsep_1 X0 X1 \\ & X2) (k2_tsep_1 X0 X1 X3)))))))) \end{aligned}$$