

t30_graph_2 (TMGoYvsAo- grtMe2o9Xg5S7FEYWbEV7L7wfV)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_graph_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r2_graph_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_graph_1 : \iota \Rightarrow \iota$ be given. Let $u2_graph_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_graph_1 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X3.(r2_graph_1 X0 X1 X2 X3) \Leftrightarrow (((k1_funct_1 \\ & (u1_graph_1 X0) X3 = X1) \wedge (k1_funct_1 (u2_graph_1 X0) X3 = X2)) \vee (\\ & (k1_funct_1 (u1_graph_1 X0) X3 = X2) \wedge (k1_funct_1 (u2_graph_1 X0) \\ & X3 = X1)))))) \end{aligned} \tag{1}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_graph_1 X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow \\ & (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow (\forall X5. \neg (\\ & r2_graph_1 X0 X1 X2 X5) \wedge ((r2_graph_1 X0 X3 X4 X5) \wedge ((\neg (X1 = X3) \wedge (X2 = \\ & X4)) \wedge (\neg (X1 = X4) \wedge (X2 = X3)))))))))) \end{aligned}$$