

t4_fomodel2 (TM-
TRAMcT1v4jvYyqX2YLTNLNyNPcPdFC8D2)

October 27, 2020

Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v11_fomodel1 : \iota \Rightarrow o$ be given. Let $l1_fomodel1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_fomodel2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v14_fomodel1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $k15_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_funct_5 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k35_fomodel1 : \iota \Rightarrow \iota$ be given. Let $k9_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_fomodel2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((\neg v6_struct_0 X0) \wedge ((v11_fomodel1 X0) \wedge (l1_fomodel1 \\
 & \quad X0))) \Rightarrow (\forall X1.(\neg v1_xboole_0 X1) \Rightarrow (\forall X2.((v1_relat_1 \\
 & \quad X2) \wedge ((v1_funct_1 X2) \wedge (v1_fomodel2 X2 X0 X1))) \Rightarrow (\forall X3.(m1_subset_1 \\
 & \quad X3 X1) \Rightarrow (\forall X4.(m1_subset_1 X4 X1) \Rightarrow (\forall X5.(v7_ordinal1 \\
 & \quad X5) \Rightarrow (\forall X6.((v14_fomodel1 X6 X5 X0) \wedge (m2_subset_1 X6 (k3_finseq_2 \\
 & \quad (k15_fomodel1 X0)) (k6_subset_1 (k3_finseq_2 (k15_fomodel1 X0)) \\
 & \quad (k1_tarski k1_xboole_0)))) \Rightarrow (\forall X7.(v7_ordinal1 X7) \Rightarrow (k1_funct_1 \\
 & \quad (k10_funct_5 k5_numbers (k35_fomodel1 X0) X1 (k9_funct_2 (k35_fomodel1 \\
 & \quad X0) X1) (k8_fomodel2 X0 X1 X3 X2) (k1_nat_1 X5 np_1)) X6 = k1_funct_1 \\
 & \quad (k10_funct_5 k5_numbers (k35_fomodel1 X0) X1 (k9_funct_2 (k35_fomodel1 \\
 & \quad X0) X1) (k8_fomodel2 X0 X1 X4 X2) (k2_nat_1 (k1_nat_1 X5 np_1) X7)) \\
 & \quad X6)))))))))
 \end{aligned}
 \tag{1}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ & ((\neg v6_struct_0\ X2) \wedge ((v11_fomodel1\ X2) \wedge (l1_fomodel1\ X2))) \Rightarrow (\\ & \forall X3.(\neg v1_xboole_0\ X3) \Rightarrow (\forall X4.(m1_subset_1\ X4\ X3) \Rightarrow \\ & (\forall X5.(m1_subset_1\ X5\ X3) \Rightarrow (\forall X6.((v1_relat_1\ X6) \wedge \\ & ((v1_funct_1\ X6) \wedge (v1_fomodel2\ X6\ X2\ X3))) \Rightarrow (\forall X7.((v14_fomodel1 \\ & X7\ X0\ X2) \wedge (m2_subset_1\ X7\ (k3_finseq_2\ (k15_fomodel1\ X2))\ (k6_subset_1 \\ & (k3_finseq_2\ (k15_fomodel1\ X2))\ (k1_tarski\ k1_xboole_0)))))) \Rightarrow \\ & (k1_funct_1\ (k10_funct_5\ k5_numbers\ (k35_fomodel1\ X2)\ X3\ (k9_funct_2 \\ & (k35_fomodel1\ X2)\ X3)\ (k8_fomodel2\ X2\ X3\ X4\ X6)\ (k1_nat_1\ X0\ np_1)) \\ & X7 = k1_funct_1\ (k10_funct_5\ k5_numbers\ (k35_fomodel1\ X2)\ X3\ (k9_funct_2 \\ & (k35_fomodel1\ X2)\ X3)\ (k8_fomodel2\ X2\ X3\ X5\ X6)\ (k2_nat_1\ (k1_nat_1 \\ & X0\ np_1)\ X1))\ X7))))))))) \end{aligned}$$