

t11_group_7

(TMFpi2r6fHwj2UpyerXxGpXtyNAT8VwPbuz)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_group_1 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k9_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_group_7 : \iota \Rightarrow o$ be given. Let $v2_group_7 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0) \wedge (l3_algstr_0 X0)) \Rightarrow ((v1_relat_1 \\ (k9_finseq_1 X0)) \wedge ((v4_relat_1 (k9_finseq_1 X0) (k1_tarski np_1)) \wedge \\ ((v1_funct_1 (k9_finseq_1 X0)) \wedge ((v1_partfun1 (k9_finseq_1 X0) \\ (k1_tarski np_1)) \wedge (v1_group_7 (k9_finseq_1 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1_relat_1 (k9_finseq_1 X0)) \wedge (v1_funct_1 (k9_finseq_1 X0)) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((X1 = \\ k9_finseq_1 X0) \Leftrightarrow ((k9_xtuple_0 X1 = k2_finseq_1 np_1) \wedge (k1_funct_1 \\ X1 np_1 = X0))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1_relat_1 X1) \wedge ((v4_relat_1 X1 X0) \wedge (\\ (v1_funct_1 X1) \wedge ((v1_partfun1 X1 X0) \wedge (v1_group_7 X1)))))) \Rightarrow ((\\ v2_group_7 X1 X0) \Leftrightarrow (\forall X2.\neg(X2 \in X0) \wedge (\forall X3.((\neg v2_struct_0 \\ X3) \wedge ((v2_group_1 X3) \wedge (l3_algstr_0 X3)))) \Rightarrow (X3 \neq k1_funct_1 X1 X2)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1_tarski X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (5)$$

Theorem 1

$$\begin{aligned} \forall X0. (& \neg v2_struct_0 X0) \wedge ((v2_group_1 X0) \wedge (l3_algstr_0 \\ & X0)) \Rightarrow ((v1_relat_1 (k9_finseq_1 X0)) \wedge ((v4_relat_1 (k9_finseq_1 \\ & X0) (k1_tarski np_1)) \wedge ((v1_funct_1 (k9_finseq_1 X0)) \wedge ((v1_partfun1 \\ & (k9_finseq_1 X0) (k1_tarski np_1)) \wedge ((v1_group_7 (k9_finseq_1 \\ & X0)) \wedge (v2_group_7 (k9_finseq_1 X0) (k1_tarski np_1)))))) \end{aligned}$$