

t11_finseq_1
(TMFMtrmz6ERp3JX4XpdwHKLubTa4sBkKBwg)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.((\\ v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((r1_tarski X0 X1) \Leftrightarrow ((r1_tarski \\ (k9_xtuple_0 X0) (k9_xtuple_0 X1)) \wedge (\forall X2.(X2 \in k9_xtuple_0 \\ X0) \Rightarrow (k1_funct_1 X0 X2 = k1_funct_1 X1 X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0 : \iota \Rightarrow \iota. \forall X1. \exists X2. ((v1_relat_1 X2) \wedge (\\ v1_funct_1 X2)) \wedge ((k9_xtuple_0 X2 = X1) \wedge (\forall X3.(X3 \in X1) \Rightarrow (\\ k1_funct_1 X2 X3 = X0 X3))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow \\ (X2 \in X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. (v1_relat_1 X0) \Rightarrow ((v1_finseq_1 X0) \Leftrightarrow (\exists X1. (v7_ordinal1 \\ X1) \wedge (k9_xtuple_0 X0 = k2_finseq_1 X1))) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\neg (\exists X1. \\ (v7_ordinal1 X1) \wedge (r1_tarski (k9_xtuple_0 X0) (k2_finseq_1 X1))) \wedge \\ (\forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1) \wedge (v1_finseq_1 \\ X1))) \Rightarrow (\neg r1_tarski X0 X1))) \end{aligned}$$