

t41_finseq_4
(TMJf1qHeUVJgR1U7yRSNf8PuFvjFkWZovpu)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finseq_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ (\forall X1.(X1 \in k10_xtuple_0 X0) \Rightarrow (r1_tarski (k10_xtuple_0 (\\ k5_finseq_4 X0 X1)) (k10_xtuple_0 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 \\ X0))) \Rightarrow ((v1_relat_1 (k5_finseq_4 X0 X1)) \wedge ((v1_funct_1 (k5_finseq_4 \\ X0 X1)) \wedge (v1_finseq_1 (k5_finseq_4 X0 X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 \\ X1))) \Rightarrow ((m1_finseq_1 X1 X0) \Leftrightarrow (r1_tarski (k10_xtuple_0 X1) X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (5)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ (\forall X1.\forall X2.(\neg v1_xboole_0 X2) \Rightarrow (((X1 \in k10_xtuple_0 \\ X0) \wedge (m2_finseq_1 X0 X2)) \Rightarrow (m2_finseq_1 (k5_finseq_4 X0 X1) X2))) \end{aligned}$$