

t129_finseq_2
(TMPudPj5MmPvXjyk3G8x628Fob4VuZ9J2fF)

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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 $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ 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.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ & (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 \\ & X1)))) \Rightarrow (((k4_finseq_1 X0 = k4_finseq_1 X1) \wedge (\forall X2.(v7_ordinal1 \\ & X2) \Rightarrow ((X2 \in k4_finseq_1 X0) \Rightarrow (k1_funct_1 X0 X2 = k1_funct_1 X1 X2)))) \Rightarrow \\ & (X0 = X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (k4_finseq_1 X0 = k9_xtuple_0 X0) \quad (3)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (m2_subset_1 (k3_finseq_1 X0) k1_numbers k5_numbers) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ & (\forall X1.(m2_subset_1 X1 k1_numbers k5_numbers) \Rightarrow ((X1 = k3_finseq_1 \\ & X0) \Leftrightarrow (k2_finseq_1 X1 = k9_xtuple_0 X0))) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ & \quad (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 \\ & \quad X1))) \Rightarrow (\forall X2.((v1_relat_1 X2) \wedge ((v1_funct_1 X2) \wedge (v1_finseq_1 \\ & \quad X2))) \Rightarrow (((r1_tarski X0 X2) \wedge (r1_tarski X1 X2) \wedge (k3_finseq_1 X0 = \\ & \quad k3_finseq_1 X1))) \Rightarrow (X0 = X1)))) \end{aligned}$$