

t59_finseq_1
(TMNjSkVz8HwZnZt7d58mnywFtjP5cz5t3AY)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k16_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.((v1_relat_1\ X1) \wedge ((\\ v1_funct_1\ X1) \wedge (v1_finseq_1\ X1))) \Rightarrow (\forall X2.((v1_relat_1 \\ X2) \wedge ((v1_funct_1\ X2) \wedge (v1_finseq_1\ X2))) \Rightarrow (((r1_xxreal_0\ X0\ (\\ k3_finseq_1\ X1)) \wedge (X2 = k5_relat_1\ X1\ (k2_finseq_1\ X0))) \Rightarrow ((k3_finseq_1 \\ X2 = X0) \wedge (k4_finseq_1\ X2 = k2_finseq_1\ X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v7_ordinal1\ X0) \wedge ((v1_relat_1\ X1) \wedge ((\\ v1_funct_1\ X1) \wedge (v1_finseq_1\ X1)))) \Rightarrow ((v1_relat_1\ (k16_finseq_1 \\ X0\ X1)) \wedge ((v1_funct_1\ (k16_finseq_1\ X0\ X1)) \wedge (v1_finseq_1\ (k16_finseq_1 \\ X0\ X1)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.((v1_relat_1\ X1) \wedge ((\\ v1_funct_1\ X1) \wedge (v1_finseq_1\ X1))) \Rightarrow (k16_finseq_1\ X0\ X1 = k5_relat_1 \\ X1\ (k2_finseq_1\ X0))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.((v1_relat_1\ X1) \wedge ((\\ v1_funct_1\ X1) \wedge (v1_finseq_1\ X1))) \Rightarrow ((r1_xxreal_0\ X0\ (k3_finseq_1 \\ X1)) \Rightarrow (k3_finseq_1\ (k16_finseq_1\ X0\ X1) = X0))) \end{aligned}$$