

t18_finseq_2
(TMVa3GTkvY5yjkQrxvBXoMn2C924KZfBor6)

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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 $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k7_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_finseq_1 : \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \Leftrightarrow (r1_tarski (k2_finseq_1 X0) (k2_finseq_1 X1)))) \quad (1)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow (\neg(X0 \neq k1_xboole_0) \wedge (\forall X1.((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1)))) \Rightarrow (\forall X2.X0 \neq k7_finseq_1 X1 (k9_finseq_1 X2)))) \quad (2)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (r1_xxreal_0 k6_numbers X0) \quad (3)$$

Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((\neg r1_xxreal_0 (k1_nat_1 X1 np_1) X0) \Leftrightarrow (r1_xxreal_0 X0 X1))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarski X0 X0 \quad (5)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (6)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow ((X0 = k1_xboole_0) \Leftrightarrow (k3_finseq_1 X0 = k6_numbers)) \quad (7)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.((v1_relat_1\ X1) \wedge ((\\ v1_funct_1\ X1) \wedge (v1_finseq_1\ X1))) \Rightarrow (\neg(k3_finseq_1\ X1 = k1_nat_1 \\ X0\ np_1) \wedge (\forall X2.((v1_relat_1\ X2) \wedge ((v1_funct_1\ X2) \wedge (v1_finseq_1 \\ X2)))) \Rightarrow (\forall X3.X1 \neq k7_finseq_1\ X2\ (k9_finseq_1\ X3)))))) \end{aligned}$$