

t1_taxonom1
(TMbZL6RyM9pkZe5Y8r9WkH29vXi2j5upmsJ)

October 27, 2020

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 $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k1_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k4_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow ((\neg r1_xxreal_0 np_1 X0) \Rightarrow (X0 = k6_numbers)) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ & (\forall X1.(v7_ordinal1 X1) \Rightarrow (\neg(\neg(\neg r1_xxreal_0 X1 (k3_finseq_1 \\ & X0)) \wedge (r1_xxreal_0 (k3_finseq_1 X0) X1)) \wedge ((\neg(\neg r1_xxreal_0 np_1 \\ & X1) \wedge (r1_xxreal_0 X1 k6_numbers)) \wedge (\neg X1 \in k4_finseq_1 X0)))) \quad (2) \end{aligned}$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ & (\forall X1.(v7_ordinal1 X1) \Rightarrow (\neg(k1_nat_1 X1 np_1 \in k4_finseq_1 \\ & X0) \wedge (r1_xxreal_0 (k3_finseq_1 X0) X1))) \quad (3) \end{aligned}$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_finseq_1 X0))) \Rightarrow \\ & (\forall X1.(v7_ordinal1 X1) \Rightarrow ((k1_nat_1 X1 np_1 \in k4_finseq_1 \\ & X0) \Rightarrow ((X1 \in k4_finseq_1 X0) \vee (X1 = k6_numbers)))) \end{aligned}$$