

t4_finseq_4
(TMWXq2YEBDGD2j5E1BoXyChXRLsNksi5osB)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $r1_finseq_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_funct_1 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.(r1_finseq_4 X0 X1) \Leftrightarrow ((X1 \in k9_xtuple_0 X0) \wedge (\forall X2. \neg (X2 \in k9_xtuple_0 X0) \wedge ((X1 \neq X2) \wedge (k1_funct_1 X0 X1 = k1_funct_1 X0 X2)))))) \quad (1)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow ((v2_funct_1 X0) \Leftrightarrow (\forall X1. \forall X2. ((X1 \in k9_xtuple_0 X0) \wedge ((X2 \in k9_xtuple_0 X0) \wedge (k1_funct_1 X0 X1 = k1_funct_1 X0 X2)))) \Rightarrow (X1 = X2))) \quad (2)$$

Theorem 1

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow ((\forall X1.(X1 \in k9_xtuple_0 X0) \Rightarrow (r1_finseq_4 X0 X1)) \Leftrightarrow (v2_funct_1 X0))$$