

t9_finseq_4
(TMLCrjHPYRZPeBhuiQyRN2z1v45C4V11sfu)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $r1_finseq_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $r2_finseq_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.(r2_finseq_4 \\ X0 X1) \Leftrightarrow (\exists X2.(X2 \in k9_xtuple_0 X0) \wedge ((X1 = k1_funct_1 X0 X2) \wedge \\ (\forall X3.\neg(X3 \in k9_xtuple_0 X0) \wedge ((X3 \neq X2) \wedge (k1_funct_1 X0 X3 = \\ X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.(r1_finseq_4 \\ X0 X1) \Leftrightarrow ((X1 \in k9_xtuple_0 X0) \wedge (\forall X2.\neg(X2 \in k9_xtuple_0 X0) \wedge \\ ((X1 \neq X2) \wedge (k1_funct_1 X0 X1 = k1_funct_1 X0 X2)))))) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.(r1_finseq_4 \\ X0 X1) \Leftrightarrow ((X1 \in k9_xtuple_0 X0) \wedge (r2_finseq_4 X0 (k1_funct_1 X0 X1)))) \end{aligned}$$