

t6_lang1
(TMRVo2jyz2bCv1R2J5Qmd4C83Kzr5wQsDAj)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $l1_lang1 : \iota \Rightarrow o$ be given. Let $m2_finseq_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_finseq_2 : \iota \Rightarrow \iota$ be given. Let $r3_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $k9_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finseq_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge ((v1_funct_1 X1) \wedge (v1_finseq_1 X1))) \Rightarrow ((X1 = k9_finseq_1 X0) \Leftrightarrow ((k3_finseq_1 X1 = np_1) \wedge (k1_funct_1 X1 np_1 = X0))) \quad (1)$$

Assume the following.

$$r1_xxreal_0 np_1 np_1 \quad (2)$$

Assume the following.

$$\forall X0. k9_finseq_1 X0 = k5_finseq_1 X0 \quad (3)$$

Assume the following.

$$\forall X0. v1_finseq_1 (k5_finseq_1 X0) \quad (4)$$

Assume the following.

$$\forall X0. (v1_relat_1 (k5_finseq_1 X0)) \wedge (v1_funct_1 (k5_finseq_1 X0)) \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_lang1 X0)) \Rightarrow (\forall X1.(m2_finseq_2 \\
& \quad X1 (u1_struct_0 X0) (k3_finseq_2 (u1_struct_0 X0))) \Rightarrow (\forall X2. \\
& (m2_finseq_2 X2 (u1_struct_0 X0) (k3_finseq_2 (u1_struct_0 X0))) \Rightarrow \\
& \quad ((r3_lang1 X0 X1 X2) \Leftrightarrow (\exists X3.((v1_relat_1 X3) \wedge ((v1_funct_1 \\
& \quad X3) \wedge (v1_finseq_1 X3))) \wedge ((r1_xxreal_0 np_1 (k3_finseq_1 X3)) \wedge \\
& ((k1_funct_1 X3 np_1 = X1) \wedge ((k1_funct_1 X3 (k3_finseq_1 X3) = X2) \wedge \\
& \quad (\forall X4.(m1_subset_1 X4 k5_numbers) \Rightarrow (\neg(r1_xxreal_0 np_1 \\
& \quad X4) \wedge ((\neg r1_xxreal_0 (k3_finseq_1 X3) X4) \wedge (\forall X5.(m2_finseq_2 \\
& \quad X5 (u1_struct_0 X0) (k3_finseq_2 (u1_struct_0 X0))) \Rightarrow (\forall X6. \\
& (m2_finseq_2 X6 (u1_struct_0 X0) (k3_finseq_2 (u1_struct_0 X0))) \Rightarrow \\
& (\neg(k1_funct_1 X3 X4 = X5) \wedge ((k1_funct_1 X3 (k2_nat_1 X4 np_1) = X6) \wedge \\
& \quad (r2_lang1 X0 X5 X6))))))))))))))))) \\
& \hspace{20em} (6)
\end{aligned}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_lang1 X0)) \Rightarrow (\forall X1.(m2_finseq_2 \\
& X1 (u1_struct_0 X0) (k3_finseq_2 (u1_struct_0 X0))) \Rightarrow (r3_lang1 \\
& \quad X0 X1 X1))
\end{aligned}$$