

t6_zf_lang

(TMPybehZAha5hT9Ruu8wGcgpvUaSDtLcvK9)

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Let $v1_zf_lang : \iota \Rightarrow o$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v8_zf_lang : \iota \Rightarrow o$ be given. Let $k10_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v9_zf_lang : \iota \Rightarrow o$ be given. Let $k11_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v10_zf_lang : \iota \Rightarrow o$ be given. Let $k12_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v11_zf_lang : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zf_lang : \iota$ be given. Let $k13_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((\\ v11_zf_lang X0) \Leftrightarrow (\exists X1.(m2_subset_1 X1 k5_numbers k1_zf_lang) \wedge \\ (\exists X2.((v1_zf_lang X2) \wedge (m2_finseq_1 X2 k5_numbers)) \wedge \\ X0 = k13_zf_lang X1 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((\\ v10_zf_lang X0) \Leftrightarrow (\exists X1.((v1_zf_lang X1) \wedge (m2_finseq_1 X1 \\ k5_numbers)) \wedge (\exists X2.((v1_zf_lang X2) \wedge (m2_finseq_1 X2 k5_numbers)) \wedge \\ (X0 = k12_zf_lang X1 X2)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((\\ v9_zf_lang X0) \Leftrightarrow (\exists X1.((v1_zf_lang X1) \wedge (m2_finseq_1 X1 \\ k5_numbers)) \wedge (\exists X2.((v1_zf_lang X2) \wedge (m2_finseq_1 X2 k5_numbers)) \wedge \\ (X0 = k11_zf_lang X1 X2)))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((\\ v8_zf_lang X0) \Leftrightarrow (\exists X1.((v1_zf_lang X1) \wedge (m2_finseq_1 X1 \\ k5_numbers)) \wedge (\exists X2.((v1_zf_lang X2) \wedge (m2_finseq_1 X2 k5_numbers)) \wedge \\ (X0 = k10_zf_lang X1 X2)))) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned}
& \forall X0.((v1_zf_lang\ X0)\wedge(m2_finseq_1\ X0\ k5_numbers))\Rightarrow((\\
& \quad \neg(v8_zf_lang\ X0)\wedge(\forall X1.((v1_zf_lang\ X1)\wedge(m2_finseq_1 \\
& \quad X1\ k5_numbers))\Rightarrow(\forall X2.((v1_zf_lang\ X2)\wedge(m2_finseq_1\ X2 \\
& \quad k5_numbers))\Rightarrow(X0\neq k10_zf_lang\ X1\ X2))))\wedge(((\exists X1.((v1_zf_lang \\
& \quad X1)\wedge(m2_finseq_1\ X1\ k5_numbers))\wedge(\exists X2.((v1_zf_lang\ X2)\wedge \\
& \quad (m2_finseq_1\ X2\ k5_numbers))\wedge(X0 = k10_zf_lang\ X1\ X2)))\Rightarrow(v8_zf_lang \\
& \quad X0))\wedge((\neg(v9_zf_lang\ X0)\wedge(\forall X1.((v1_zf_lang\ X1)\wedge(m2_finseq_1 \\
& \quad X1\ k5_numbers))\Rightarrow(\forall X2.((v1_zf_lang\ X2)\wedge(m2_finseq_1\ X2 \\
& \quad k5_numbers))\Rightarrow(X0\neq k11_zf_lang\ X1\ X2))))\wedge(((\exists X1.((v1_zf_lang \\
& \quad X1)\wedge(m2_finseq_1\ X1\ k5_numbers))\wedge(\exists X2.((v1_zf_lang\ X2)\wedge \\
& \quad (m2_finseq_1\ X2\ k5_numbers))\wedge(X0 = k11_zf_lang\ X1\ X2)))\Rightarrow(v9_zf_lang \\
& \quad X0))\wedge((\neg(v10_zf_lang\ X0)\wedge(\forall X1.((v1_zf_lang\ X1)\wedge(m2_finseq_1 \\
& \quad X1\ k5_numbers))\Rightarrow(\forall X2.((v1_zf_lang\ X2)\wedge(m2_finseq_1\ X2 \\
& \quad k5_numbers))\Rightarrow(X0\neq k12_zf_lang\ X1\ X2))))\wedge(((\exists X1.((v1_zf_lang \\
& \quad X1)\wedge(m2_finseq_1\ X1\ k5_numbers))\wedge(\exists X2.((v1_zf_lang\ X2)\wedge \\
& \quad (m2_finseq_1\ X2\ k5_numbers))\wedge(X0 = k12_zf_lang\ X1\ X2)))\Rightarrow(v10_zf_lang \\
& \quad X0))\wedge((\neg(v11_zf_lang\ X0)\wedge(\forall X1.(m2_subset_1\ X1\ k5_numbers \\
& \quad k1_zf_lang))\Rightarrow(\forall X2.((v1_zf_lang\ X2)\wedge(m2_finseq_1\ X2\ k5_numbers))\Rightarrow \\
& \quad (X0\neq k13_zf_lang\ X1\ X2))))\wedge(((\exists X1.(m2_subset_1\ X1\ k5_numbers \\
& \quad k1_zf_lang)\wedge(\exists X2.((v1_zf_lang\ X2)\wedge(m2_finseq_1\ X2\ k5_numbers))\wedge \\
& \quad (X0 = k13_zf_lang\ X1\ X2)))\Rightarrow(v11_zf_lang\ X0)))))))))
\end{aligned}$$