

t74_zf_lang
(TMF1Gdwrfc2nXb2LaQ1EZMjr3izR3Dp7DTr)

October 27, 2020

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 $v5_zf_lang : \iota \Rightarrow o$ be given. Let $r3_zf_lang : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k21_zf_lang : \iota \Rightarrow \iota$ be given. Let $k22_zf_lang : \iota \Rightarrow \iota$ be given. Let $r1_zf_lang : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow ((r1_zf_lang \\ & X0 X1) \Rightarrow (r3_zf_lang X0 X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow ((v5_zf_lang \\ & X0) \Rightarrow ((r1_zf_lang X1 X0) \Leftrightarrow ((X1 = k21_zf_lang X0) \vee (X1 = k22_zf_lang \\ & X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow ((v5_zf_lang \\ & X0) \Rightarrow ((\neg(X1 = k21_zf_lang X0) \wedge (\forall X2.((v1_zf_lang X2) \wedge (m2_finseq_1 \\ & X2 k5_numbers)) \Rightarrow (k7_zf_lang X1 X2 \neq X0))) \wedge (((\exists X2.((v1_zf_lang \\ & X2) \wedge (m2_finseq_1 X2 k5_numbers)) \wedge (k7_zf_lang X1 X2 = X0)) \Rightarrow (X1 = \\ & k21_zf_lang X0)) \wedge ((\neg(X1 = k22_zf_lang X0) \wedge (\forall X2.((v1_zf_lang \\ & X2) \wedge (m2_finseq_1 X2 k5_numbers)) \Rightarrow (k7_zf_lang X2 X1 \neq X0))) \wedge ((\\ & \exists X2.((v1_zf_lang X2) \wedge (m2_finseq_1 X2 k5_numbers)) \wedge (k7_zf_lang \\ & X2 X1 = X0)) \Rightarrow (X1 = k22_zf_lang X0))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_zf_lang\ X0)\wedge(m2_finseq_1\ X0\ k5_numbers))\Rightarrow((\\ v5_zf_lang\ X0)\Leftrightarrow(\exists X1.((v1_zf_lang\ X1)\wedge(m2_finseq_1\ X1 \\ k5_numbers))\wedge(\exists X2.((v1_zf_lang\ X2)\wedge(m2_finseq_1\ X2\ k5_numbers))\wedge \\ (X0 = k7_zf_lang\ X1\ X2)))) \end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_zf_lang\ X0)\wedge(m2_finseq_1\ X0\ k5_numbers))\Rightarrow((\\ v5_zf_lang\ X0)\Rightarrow((r3_zf_lang\ (k21_zf_lang\ X0)\ X0)\wedge(r3_zf_lang \\ (k22_zf_lang\ X0)\ X0))) \end{aligned}$$