

t6_zf_lang1 (TM- MMW2Dxznzeary2dhGPgWc6CSamQxux5Ag)

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 $k25_zf_lang : \iota \Rightarrow \iota$ be given. Let $k11_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k26_zf_lang : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v9_zf_lang : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1_zf_lang X0) \wedge (m1_finseq_1 X0 k5_numbers)) \wedge \\ & ((v1_zf_lang X1) \wedge (m1_finseq_1 X1 k5_numbers))) \Rightarrow ((v1_zf_lang \\ & (k11_zf_lang X0 X1)) \wedge (m2_finseq_1 (k11_zf_lang X0 X1) k5_numbers)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((\\ & v9_zf_lang X0) \Rightarrow (\forall X1. ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 \\ & k5_numbers)) \Rightarrow ((X1 = k26_zf_lang X0) \Leftrightarrow (\exists X2. ((v1_zf_lang \\ & X2) \wedge (m2_finseq_1 X2 k5_numbers)) \wedge (X0 = k11_zf_lang X2 X1)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((\\ & v9_zf_lang X0) \Rightarrow (\forall X1. ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 \\ & k5_numbers)) \Rightarrow ((X1 = k25_zf_lang X0) \Leftrightarrow (\exists X2. ((v1_zf_lang \\ & X2) \wedge (m2_finseq_1 X2 k5_numbers)) \wedge (X0 = k11_zf_lang X1 X2)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((\\ & v9_zf_lang X0) \Leftrightarrow (\exists X1. ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 \\ & k5_numbers)) \wedge (\exists X2. ((v1_zf_lang X2) \wedge (m2_finseq_1 X2 k5_numbers)) \wedge \\ & (X0 = k11_zf_lang X1 X2)))))) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow ((k25_zf_lang \\ & (k11_zf_lang X0 X1) = X0) \wedge (k26_zf_lang (k11_zf_lang X0 X1) = X1))) \end{aligned}$$