

t13_zf_lang1

(TMF1xFAbEwqM2yNXxKtj3LewndQg4SDdQ1p)

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 $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zf_lang : \iota$ be given. Let $k16_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k14_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2. (m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((m1_subset_1 X0 k1_zf_lang) \wedge ((v1_zf_lang \\ & X1) \wedge (m1_finseq_1 X1 k5_numbers))) \Rightarrow (v1_zf_lang (k8_zf_lang X0 \\ & X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\neg v1_xboole_0 k1_zf_lang \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((m1_subset_1 X0 k1_zf_lang) \wedge (m1_finseq_1 \\ & X1 k5_numbers)) \Rightarrow (m2_finseq_1 (k8_zf_lang X0 X1) k5_numbers) \end{aligned} \quad (5)$$

Assume the following.

$$m1_subset_1 k1_zf_lang (k1_zfmisc_1 k5_numbers) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k5_numbers k1_zf_lang) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 k5_numbers k1_zf_lang) \Rightarrow (\forall X3.((v1_zf_lang X3) \wedge (m2_finseq_1 \\ & X3 k5_numbers)) \Rightarrow (k16_zf_lang X0 X1 X2 X3 = k8_zf_lang X0 (k14_zf_lang \\ & X1 X2 X3)))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k5_numbers k1_zf_lang) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2.((v1_zf_lang \\ & X2) \wedge (m2_finseq_1 X2 k5_numbers)) \Rightarrow (k14_zf_lang X0 X1 X2 = k8_zf_lang \\ & X0 (k8_zf_lang X1 X2)))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zf_misc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 k5_numbers k1_zf_lang) \Rightarrow (\forall X3.(m2_subset_1 X3 k5_numbers \\ & k1_zf_lang) \Rightarrow ((k16_zf_lang X1 X2 X3 X0 = k8_zf_lang X1 (k8_zf_lang \\ & X2 (k8_zf_lang X3 X0))) \wedge (k16_zf_lang X1 X2 X3 X0 = k14_zf_lang X1 \\ & X2 (k8_zf_lang X3 X0)))))) \end{aligned}$$