

t15_zf_lang1

(TMGfePXEnDhUbHGevE49wKc33egiUmPt3st)

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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 $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zf_lang : \iota$ be given. Let $k16_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\begin{aligned} & \forall X0.(m2_finseq_1 X0 k5_numbers) \Rightarrow (\forall X1.(m2_finseq_1 \\ & X1 k5_numbers) \Rightarrow (\forall X2.(m2_subset_1 X2 k5_numbers k1_zf_lang) \Rightarrow \\ & (\forall X3.(m2_subset_1 X3 k5_numbers k1_zf_lang) \Rightarrow ((k8_zf_lang \\ & X2 X0 = k8_zf_lang X3 X1) \Rightarrow ((X2 = X3) \wedge (X0 = X1)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow (\forall X2.(\\ & m2_subset_1 X2 k5_numbers k1_zf_lang) \Rightarrow (\forall X3.(m2_subset_1 \\ & X3 k5_numbers k1_zf_lang) \Rightarrow (\forall X4.(m2_subset_1 X4 k5_numbers \\ & k1_zf_lang) \Rightarrow (\forall X5.(m2_subset_1 X5 k5_numbers k1_zf_lang) \Rightarrow \\ & ((k14_zf_lang X2 X3 X0 = k14_zf_lang X4 X5 X1) \Rightarrow ((X2 = X4) \wedge ((X3 = X5) \wedge \\ & (X0 = X1)))))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \quad (4)$$

Assume the following.

$$\neg v1_xboole_0 k1_zf_lang \quad (5)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((m1_subset_1 \ X0 \ k1_zf_lang) \wedge \\ & ((m1_subset_1 \ X1 \ k1_zf_lang) \wedge ((v1_zf_lang \ X2) \wedge (m1_finseq_1 \\ & X2 \ k5_numbers)))) \Rightarrow ((v1_zf_lang \ (k14_zf_lang \ X0 \ X1 \ X2)) \wedge (m2_finseq_1 \\ & (k14_zf_lang \ X0 \ X1 \ X2) \ k5_numbers)) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_subset_1 \ X0 \ k5_numbers \ k1_zf_lang) \Rightarrow (\forall X1. \\ & (m2_subset_1 \ X1 \ k5_numbers \ k1_zf_lang) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 \ k5_numbers \ k1_zf_lang) \Rightarrow (\forall X3.((v1_zf_lang \ X3) \wedge (m2_finseq_1 \\ & X3 \ k5_numbers)) \Rightarrow (k16_zf_lang \ X0 \ X1 \ X2 \ X3 = k8_zf_lang \ X0 \ (k14_zf_lang \\ & X1 \ X2 \ X3)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0) \Rightarrow (\forall X1.(m1_subset_1 \ X1 \ (k1_zfmisc_1 \ X0)) \Rightarrow (v1_xboole_0 \ X1)) \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_zf_lang \ X0) \wedge (m2_finseq_1 \ X0 \ k5_numbers)) \Rightarrow (\forall X1. \\ & ((v1_zf_lang \ X1) \wedge (m2_finseq_1 \ X1 \ k5_numbers)) \Rightarrow (\forall X2.(\\ & m2_subset_1 \ X2 \ k5_numbers \ k1_zf_lang) \Rightarrow (\forall X3.(m2_subset_1 \\ & X3 \ k5_numbers \ k1_zf_lang) \Rightarrow (\forall X4.(m2_subset_1 \ X4 \ k5_numbers \\ & k1_zf_lang) \Rightarrow (\forall X5.(m2_subset_1 \ X5 \ k5_numbers \ k1_zf_lang) \Rightarrow \\ & (\forall X6.(m2_subset_1 \ X6 \ k5_numbers \ k1_zf_lang) \Rightarrow (\forall X7. \\ & (m2_subset_1 \ X7 \ k5_numbers \ k1_zf_lang) \Rightarrow ((k16_zf_lang \ X2 \ X3 \ X4 \\ & X0 = k16_zf_lang \ X5 \ X6 \ X7 \ X1) \Rightarrow ((X2 = X5) \wedge ((X3 = X6) \wedge ((X4 = X7) \wedge (X0 = \\ & X1))))))))))))) \end{aligned}$$