

t170_zf_lang1

(TMUSTs242U6CWcXZbYRia4nFHhQTHuUPNhS)

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 $v6_zf_lang : \iota \Rightarrow o$ be given. Let $k6_zf_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_zf_lang : \iota \Rightarrow o$ be given. Let $v3_zf_lang : \iota \Rightarrow o$ be given. Let $v4_zf_lang : \iota \Rightarrow o$ be given. Let $v5_zf_lang : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $np_4 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_2 : \iota$ be given. Let $np_3 : \iota$ be given. Let $k8_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\neg (\neg v2_zf_lang X0) \wedge ((\neg v3_zf_lang X0) \wedge ((\neg v4_zf_lang X0) \wedge ((\neg v5_zf_lang X0) \wedge (\neg v6_zf_lang X0))))) \quad (1)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((\neg (v2_zf_lang X0) \wedge (\neg (\neg v3_zf_lang X0) \wedge ((\neg v4_zf_lang X0) \wedge ((\neg v5_zf_lang X0) \wedge (\neg v6_zf_lang X0))))) \wedge ((\neg (v3_zf_lang X0) \wedge (\neg (\neg v4_zf_lang X0) \wedge ((\neg v5_zf_lang X0) \wedge (\neg v6_zf_lang X0))))) \wedge ((\neg (v4_zf_lang X0) \wedge ((v5_zf_lang X0) \vee (v6_zf_lang X0))) \wedge (\neg (v5_zf_lang X0) \wedge (v6_zf_lang X0)))) \quad (2)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((k1_funct_1 X0 np_1 = np_4) \Rightarrow (v6_zf_lang X0)) \quad (3)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((k1_funct_1 X0 np_1 = np_1) \Rightarrow (v3_zf_lang X0)) \quad (4)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((k1_funct_1 X0 np_1 = k6_numbers) \Rightarrow (v2_zf_lang X0)) \quad (5)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\neg (\neg (v2_zf_lang X0) \wedge (k1_funct_1 X0 np_1 = k6_numbers)) \wedge (\neg (v3_zf_lang X0) \wedge (k1_funct_1 X0 np_1 = np_1)) \wedge (\neg (v4_zf_lang X0) \wedge (k1_funct_1 X0 np_1 = np_2)) \wedge (\neg (v5_zf_lang X0) \wedge (k1_funct_1 X0 np_1 = np_3)) \wedge (\neg (v6_zf_lang X0) \wedge (k1_funct_1 X0 np_1 = np_4)))) \quad (6)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((v6_zf_lang X0) \Rightarrow (k1_funct_1 X0 np_1 = np_4)) \quad (7)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow ((v2_zf_lang X0) \Rightarrow (k1_funct_1 X0 np_1 = k6_numbers)) \quad (8)$$

Assume the following.

$$\forall X0.(m2_subset_1 X0 k5_numbers k1_zf_lang) \Rightarrow (\forall X1. ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow (k1_funct_1 (k8_zf_lang X0 X1) np_1 = np_4)) \quad (9)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2.(m2_subset_1 X2 k5_numbers k1_zf_lang) \Rightarrow ((v5_zf_lang X0) \Leftrightarrow (v5_zf_lang (k6_zf_lang1 X0 X1 X2)))))) \quad (10)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2.(m2_subset_1 X2 k5_numbers k1_zf_lang) \Rightarrow ((v4_zf_lang X0) \Leftrightarrow (v4_zf_lang (k6_zf_lang1 X0 X1 X2)))))) \quad (11)$$

Assume the following.

$$\forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2.(m2_subset_1 X2 k5_numbers k1_zf_lang) \Rightarrow ((v3_zf_lang X0) \Leftrightarrow (v3_zf_lang (k6_zf_lang1 X0 X1 X2)))))) \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_zf_lang\ X0)\wedge(m2_finseq_1\ X0\ k5_numbers))\Rightarrow(\forall X1. \\ (m2_subset_1\ X1\ k5_numbers\ k1_zf_lang)\Rightarrow(\forall X2.(m2_subset_1 \\ X2\ k5_numbers\ k1_zf_lang)\Rightarrow((v2_zf_lang\ X0)\Leftrightarrow(v2_zf_lang\ (k6_zf_lang1 \\ X0\ X1\ X2)))))) \end{aligned} \quad (13)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0\ X0)\wedge((\neg v1_xboole_0\ X1)\wedge \\ (m1_subset_1\ X1\ (k1_zfmisc_1\ X0))))\Rightarrow(\forall X2.(m2_subset_1 \\ X2\ X0\ X1)\Leftrightarrow(m1_subset_1\ X2\ X1)) \end{aligned} \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1\ X1\ X0)\Leftrightarrow(m1_finseq_1\ X1\ X0) \quad (15)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((m1_subset_1\ X0\ k1_zf_lang)\wedge((v1_zf_lang \\ X1)\wedge(m1_finseq_1\ X1\ k5_numbers)))\Rightarrow(v1_zf_lang\ (k8_zf_lang\ X0 \\ X1)) \end{aligned} \quad (16)$$

Assume the following.

$$\neg v1_xboole_0\ k1_zf_lang \quad (17)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((m1_subset_1\ X0\ k1_zf_lang)\wedge(m1_finseq_1 \\ X1\ k5_numbers))\Rightarrow(m2_finseq_1\ (k8_zf_lang\ X0\ X1)\ k5_numbers) \end{aligned} \quad (18)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(((v1_zf_lang\ X0)\wedge(m1_finseq_1 \\ X0\ k5_numbers))\wedge((m1_subset_1\ X1\ k1_zf_lang)\wedge(m1_subset_1\ X2 \\ k1_zf_lang)))\Rightarrow((v1_zf_lang\ (k6_zf_lang1\ X0\ X1\ X2))\wedge(m2_finseq_1 \\ (k6_zf_lang1\ X0\ X1\ X2)\ k5_numbers)) \end{aligned} \quad (19)$$

Assume the following.

$$m1_subset_1\ k1_zf_lang\ (k1_zfmisc_1\ k5_numbers) \quad (20)$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1 \\ X0))\Rightarrow(v1_xboole_0\ X1)) \quad (21)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_zf_lang\ X0)\wedge(m2_finseq_1\ X0\ k5_numbers))\Rightarrow(\forall X1. \\ (m2_subset_1\ X1\ k5_numbers\ k1_zf_lang)\Rightarrow(\forall X2.(m2_subset_1 \\ X2\ k5_numbers\ k1_zf_lang)\Rightarrow((v6_zf_lang\ X0)\Leftrightarrow(v6_zf_lang\ (k6_zf_lang1 \\ X0\ X1\ X2)))))) \end{aligned}$$