

t20_zf_lang1
(TMPs1tXQpYXMBwpNX8rtnFahyhjw2Xiq6qY)

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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 $k17_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\begin{aligned} \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow (\forall X2.(\\ m2_subset_1 X2 k5_numbers k1_zf_lang) \Rightarrow (\forall X3.(m2_subset_1 \\ X3 k5_numbers k1_zf_lang) \Rightarrow (\forall X4.(m2_subset_1 X4 k5_numbers \\ k1_zf_lang) \Rightarrow (\forall X5.(m2_subset_1 X5 k5_numbers k1_zf_lang) \Rightarrow \\ ((k15_zf_lang X2 X3 X0 = k15_zf_lang X4 X5 X1) \Rightarrow ((X2 = X4) \wedge ((X3 = X5) \wedge \\ (X0 = X1)))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. (m2_finseq_1 X1 X0) \Leftrightarrow (m1_finseq_1 X1 X0) \tag{3}$$

Assume the following.

$$\neg v1_xboole_0 k1_zf_lang \tag{4}$$

Assume the following.

$$m1_subset_1 k1_zf_lang (k1_zfmisc_1 k5_numbers) \tag{5}$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((m1_subset_1 X0 k1_zf_lang) \wedge ((v1_zf_lang \\ X1) \wedge (m1_finseq_1 X1 k5_numbers))) \Rightarrow ((v1_zf_lang (k13_zf_lang \\ X0 X1)) \wedge (m2_finseq_1 (k13_zf_lang X0 X1) k5_numbers)) \end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k5_numbers k1_zf_lang) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 k5_numbers k1_zf_lang) \Rightarrow (\forall X3.((v1_zf_lang X3) \wedge (m2_finseq_1 \\ & X3 k5_numbers)) \Rightarrow (k17_zf_lang X0 X1 X2 X3 = k13_zf_lang X0 (k15_zf_lang \\ & X1 X2 X3)))))) \end{aligned} \tag{7}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k5_numbers k1_zf_lang) \Rightarrow (\forall X1. \\ & (m2_subset_1 X1 k5_numbers k1_zf_lang) \Rightarrow (\forall X2.((v1_zf_lang \\ & X2) \wedge (m2_finseq_1 X2 k5_numbers)) \Rightarrow (k15_zf_lang X0 X1 X2 = k13_zf_lang \\ & X0 (k13_zf_lang X1 X2)))) \end{aligned} \tag{8}$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \tag{9}$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow (\forall X2.(\\ & m2_subset_1 X2 k5_numbers k1_zf_lang) \Rightarrow (\forall X3.(m2_subset_1 \\ & X3 k5_numbers k1_zf_lang) \Rightarrow (\forall X4.(m2_subset_1 X4 k5_numbers \\ & k1_zf_lang) \Rightarrow (\forall X5.(m2_subset_1 X5 k5_numbers k1_zf_lang) \Rightarrow \\ & (\forall X6.(m2_subset_1 X6 k5_numbers k1_zf_lang) \Rightarrow ((k17_zf_lang \\ & X2 X3 X4 X0 = k15_zf_lang X5 X6 X1) \Rightarrow ((X2 = X5) \wedge ((X3 = X6) \wedge (k13_zf_lang \\ & X4 X0 = X1)))))))))) \end{aligned}$$