

t103_zf_lang1
(TMTSHSxpny6b9rsxqJg26fEmeCmj1JeLVSB)

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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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $r2_zf_model : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k11_zf_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zf_lang : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_zf_model : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow (\forall X2. (\\ (v1_zf_lang X2) \wedge (m2_finseq_1 X2 k5_numbers)) \Rightarrow (\forall X3. (\neg \\ v1_xboole_0 X3) \Rightarrow (\forall X4. ((v1_funct_1 X4) \wedge ((v1_funct_2 X4 \\ k1_zf_lang X3) \wedge (m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang \\ X3)))))) \Rightarrow (((r1_zf_model X3 X4 (k11_zf_lang X0 X1)) \wedge (r1_zf_model \\ X3 X4 (k11_zf_lang X1 X2))) \Rightarrow (r1_zf_model X3 X4 (k11_zf_lang X0 X2)))))) \end{aligned} \quad (1)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (((v1_zf_lang X0) \wedge (m1_finseq_1 X0 k5_numbers)) \wedge \\ ((v1_zf_lang X1) \wedge (m1_finseq_1 X1 k5_numbers))) \Rightarrow ((v1_zf_lang \\ (k11_zf_lang X0 X1)) \wedge (m2_finseq_1 (k11_zf_lang X0 X1) k5_numbers)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((v1_zf_lang X1) \wedge (\\ m2_finseq_1 X1 k5_numbers)) \Rightarrow ((r2_zf_model X0 X1) \Leftrightarrow (\forall X2. \\ ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 k1_zf_lang X0) \wedge (m1_subset_1 \\ X2 (k1_zfmisc_1 (k2_zfmisc_1 k1_zf_lang X0)))))) \Rightarrow (r1_zf_model \\ X0 X2 X1)))) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_zf_lang X0) \wedge (m2_finseq_1 X0 k5_numbers)) \Rightarrow (\forall X1. \\ & \quad ((v1_zf_lang X1) \wedge (m2_finseq_1 X1 k5_numbers)) \Rightarrow (\forall X2. (\\ & \quad \quad (v1_zf_lang X2) \wedge (m2_finseq_1 X2 k5_numbers)) \Rightarrow (\forall X3. (\neg \\ v1_xboole_0 X3) \Rightarrow (((r2_zf_model X3 (k11_zf_lang X0 X1)) \wedge (r2_zf_model \\ X3 (k11_zf_lang X1 X2))) \Rightarrow (r2_zf_model X3 (k11_zf_lang X0 X2)))))) \end{aligned}$$