t137_zf_lang1 (TMJbcH6STG4SMDe43ZEGDuvfLAMXfR7uHpv)

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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 $k3\_zf\_lang1 : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $np\_\_3 : \iota$ be given. Let $np\_\_4 : \iota$ be given. Let $k3\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.k3\_enumset1\ X0\ X1\ X2\ X3\ X4 = k2\_xboole\_0\ (k2\_tarski\ X0\ X1)\ (k1\_enumset1\ X2\ X3\ X4) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.k6\_subset\_1\ X0\ X1 = k4\_xboole\_0\ X0\ X1 \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k4\_xboole\_0\ X0\ X1) \Leftrightarrow (\forall X3.\ (X3 \in X2) \Leftrightarrow ((X3 \in X0) \wedge (\neg X3 \in X1))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_xboole\_0\ X0\ X1) \Leftrightarrow (\forall X3.\ (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \tag{4}$$

Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow (k3\_zf\_lang1\ X0 = k6\_subset\_1\ (k10\_xtuple\_0\ X0)\ (k3\_enumset1\ k6\_numbers\ np\_\_1\ np\_\_2\ np\_\_3\ np\_\_4)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_tarski\ X0\ X1) \Leftrightarrow (\forall X3.\ (X3 \in X2) \Leftrightarrow ((X3 = X0) \vee (X3 = X1))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(X3 = k1\_enumset1\ X0\ X1\ X2)\Leftrightarrow(\forall X4.(X4 \in X3)\Leftrightarrow(\neg(X4{\neq}X0)\wedge((X4{\neq}X1)\wedge(X4{\neq}X2)))) \tag{7}$$

Theorem 1

$$\forall X0.((v1\_zf\_lang\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.(X1 \in k3\_zf\_lang1\ X0)\Rightarrow((X1{\neq}k6\_numbers)\wedge((X1{\neq}np\_\_1)\wedge((X1{\neq}np\_\_2)\wedge((X1{\neq}np\_\_3)\wedge(X1{\neq}np\_\_4))))))$$