t107_zf_lang1 (TMFV8LEskawtipgvyiGztN5FuzHrthKFGBP)

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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 $v1\_funct\_1 : \iota \Rightarrow o$ 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 $k11\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2\_zf\_model : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ k1\_zf\_lang\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang\ X0))))) \Rightarrow (\forall X2.((v1\_zf\_lang\ X2) \wedge (m2\_finseq\_1\ X2\ k5\_numbers)) \Rightarrow (\forall X3.((v1\_zf\_lang\ X3) \wedge (m2\_finseq\_1\ X3\ k5\_numbers)) \Rightarrow ((r1\_zf\_model\ X0\ X1\ (k11\_zf\_lang\ X2\ X3)) \Leftrightarrow ((r1\_zf\_model\ X0\ X1\ X2) \Rightarrow (r1\_zf\_model\ X0\ X1\ X3))))))) \tag{1}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ k1\_zf\_lang\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang\ X0))))) \Rightarrow (\forall X2.((v1\_zf\_lang\ X2) \wedge (m2\_finseq\_1\ X2\ k5\_numbers)) \Rightarrow (\forall X3.((v1\_zf\_lang\ X3) \wedge (m2\_finseq\_1\ X3\ k5\_numbers)) \Rightarrow ((r1\_zf\_model\ X0\ X1\ (k7\_zf\_lang\ X2\ X3)) \Leftrightarrow ((r1\_zf\_model\ X0\ X1\ X2) \wedge (r1\_zf\_model\ X0\ X1\ X3))))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Leftrightarrow (m1\_finseq\_1\ X1\ X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_zf\_lang\ X0) \wedge (m1\_finseq\_1\ X0\ k5\_numbers)) \wedge ((v1\_zf\_lang\ X1) \wedge (m1\_finseq\_1\ X1\ k5\_numbers))) \Rightarrow (v1\_zf\_lang\ (k7\_zf\_lang\ X0\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_finseq\_1\ X0\ k5\_numbers)\wedge(m1\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(m2\_finseq\_1\ (k7\_zf\_lang\ X0\ X1)\ k5\_numbers) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_zf\_lang\ X0)\wedge(m1\_finseq\_1\ X0\ k5\_numbers))\wedge((v1\_zf\_lang\ X1)\wedge(m1\_finseq\_1\ X1\ k5\_numbers)))\Rightarrow((v1\_zf\_lang\ (k11\_zf\_lang\ X0\ X1))\wedge(m2\_finseq\_1\ (k11\_zf\_lang\ X0\ X1)\ k5\_numbers)) \tag{6}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((v1\_zf\_lang\ X1)\wedge(m2\_finseq\_1\ X1\ k5\_numbers))\Rightarrow((r2\_zf\_model\ X0\ X1)\Leftrightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ k1\_zf\_lang\ X0)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang\ X0))))))\Rightarrow(r1\_zf\_model\ X0\ X2\ X1)))) \tag{7}$$

Theorem 1

$$\forall X0.((v1\_zf\_lang\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.((v1\_zf\_lang\ X1)\wedge(m2\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(\forall X2.(\neg v1\_xboole\_0\ X2)\Rightarrow(\forall X3.((v1\_funct\_1\ X3)\wedge((v1\_funct\_2\ X3\ k1\_zf\_lang\ X2)\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang\ X2)))))\Rightarrow((r1\_zf\_model\ X2\ X3\ (k11\_zf\_lang\ (k7\_zf\_lang\ X0\ X1)\ X0))\wedge(r2\_zf\_model\ X2\ (k11\_zf\_lang\ (k7\_zf\_lang\ X0\ X1)\ X0))))))$$