t89_zf_lang1 (TMF7YL5Wsr34fhLeQZAB1MUpAQ6YgvAanPR)

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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 $v8\_zf\_lang : \iota \Rightarrow o$ be given. Let $r1\_zf\_model : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k21\_zf\_lang : \iota \Rightarrow \iota$ be given. Let $k22\_zf\_lang : \iota \Rightarrow \iota$ be given. Let $k10\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow (\forall X1.((v1\_zf\_lang\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \Rightarrow ((k21\_zf\_lang\ (k10\_zf\_lang\ X0\ X1) = X0) \wedge (k22\_zf\_lang\ (k10\_zf\_lang\ X0\ X1) = X1))) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow ((v8\_zf\_lang\ X0) \Rightarrow (X0 = k10\_zf\_lang\ (k21\_zf\_lang\ X0)\ (k22\_zf\_lang\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ k1\_zf\_lang\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang\ X0))))) \Rightarrow (\forall X2.((v1\_zf\_lang\ X2) \wedge (m2\_finseq\_1\ X2\ k5\_numbers)) \Rightarrow (\forall X3.((v1\_zf\_lang\ X3) \wedge (m2\_finseq\_1\ X3\ k5\_numbers)) \Rightarrow ((r1\_zf\_model\ X0\ X1\ (k10\_zf\_lang\ X2\ X3)) \Leftrightarrow ((r1\_zf\_model\ X0\ X1\ X2) \vee (r1\_zf\_model\ X0\ X1\ X3))))))) \tag{3}$$

Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow ((v8\_zf\_lang\ X0) \Leftrightarrow (\exists X1.((v1\_zf\_lang\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \wedge (\exists X2.((v1\_zf\_lang\ X2) \wedge (m2\_finseq\_1\ X2\ k5\_numbers)) \wedge (X0 = k10\_zf\_lang\ X1\ X2)))) \tag{4}$$

Theorem 1

$$\forall X0.((v1\_zf\_lang\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.(\neg v1\_xboole\_0\ X1)\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ k1\_zf\_lang\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang\ X1)))))\Rightarrow((v8\_zf\_lang\ X0)\Rightarrow((r1\_zf\_model\ X1\ X2\ X0)\Leftrightarrow((r1\_zf\_model\ X1\ X2\ (k21\_zf\_lang\ X0))\vee(r1\_zf\_model\ X1\ X2\ (k22\_zf\_lang\ X0)))))))$$