

t92\_zf\_lang1  
(TMHKjh2oDTSWBCBChxURbguoQwmSmARETG8)

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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  $v11\_zf\_lang : \iota \Rightarrow o$  be given. Let  $r1\_zf\_model : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zf\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k23\_zf\_lang : \iota \Rightarrow \iota$  be given. Let  $k24\_zf\_lang : \iota \Rightarrow \iota$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k13\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1\_zf\_lang X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow (\forall X1. \\ & (m2\_subset\_1 X1 k5\_numbers k1\_zf\_lang) \Rightarrow ((k23\_zf\_lang (k13\_zf\_lang \\ & X1 X0) = X1) \wedge (k24\_zf\_lang (k13\_zf\_lang X1 X0) = X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_zf\_lang X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow (\forall X1. \\ & (m2\_subset\_1 X1 k5\_numbers k1\_zf\_lang) \Rightarrow (\forall X2.(\neg v1\_xboole\_0 \\ & X2) \Rightarrow (\forall X3.((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 k1\_zf\_lang \\ & X2) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k1\_zf\_lang X2)))))) \Rightarrow \\ & ((r1\_zf\_model X2 X3 (k13\_zf\_lang X1 X0)) \Leftrightarrow (\exists X4.(m1\_subset\_1 \\ & X4 X2) \wedge (r1\_zf\_model X2 (k2\_zf\_lang1 X2 X3 X1 X4) X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1\_zf\_lang X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow (( \\ & v11\_zf\_lang X0) \Leftrightarrow (\exists X1.(m2\_subset\_1 X1 k5\_numbers k1\_zf\_lang) \wedge \\ & (\exists X2.((v1\_zf\_lang X2) \wedge (m2\_finseq\_1 X2 k5\_numbers)) \wedge \\ & X0 = k13\_zf\_lang X1 X2)))) \end{aligned} \quad (3)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v1\_zf\_lang\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1. \\ & \quad (\neg v1\_xboole\_0\ X1)\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2 \\ X2\ k1\_zf\_lang\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang \\ X1))))))\Rightarrow((v11\_zf\_lang\ X0)\Rightarrow((r1\_zf\_model\ X1\ X2\ X0)\Leftrightarrow(\exists X3. \\ (m1\_subset\_1\ X3\ X1)\wedge(r1\_zf\_model\ X1\ (k2\_zf\_lang1\ X1\ X2\ (k23\_zf\_lang \\ X0\ X3)\ (k24\_zf\_lang\ X0))))))) \end{aligned}$$