# t94_zf_lang1 (TMUaRE7nuS9TcDfPRZWH8difFHf7sJxXGx5)

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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 $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zf\_lang : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $r2\_zf\_model : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k13\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k2\_zf\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow (\forall X1.\ (m2\_subset\_1\ X1\ k5\_numbers\ k1\_zf\_lang) \Rightarrow (\forall X2.(\neg v1\_xboole\_0\ X2) \Rightarrow (\forall X3.((v1\_funct\_1\ X3) \wedge ((v1\_funct\_2\ X3\ k1\_zf\_lang\ X2) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang\ X2))))) \Rightarrow ((r1\_zf\_model\ X2\ X3\ (k13\_zf\_lang\ X1\ X0)) \Leftrightarrow (\exists X4.(m1\_subset\_1\ X4\ X2) \wedge (r1\_zf\_model\ X2\ (k2\_zf\_lang1\ X2\ X3\ X1\ X4)\ X0))))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge ((\neg v1\_xboole\_0\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)))) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ X0\ X1) \Leftrightarrow (m1\_subset\_1\ X2\ X1)) \tag{2}$$

Assume the following.

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

Assume the following.

$$\neg v1\_xboole\_0\ k1\_zf\_lang \tag{4}$$

Assume the following.

$$\forall X0.\exists X1.m1\_subset\_1\ X1\ X0 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((\neg v1\_xboole\_0\ X0)\wedge (((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ k1\_zf\_lang\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang\ X0)))))\wedge((m1\_subset\_1\ X2\ k1\_zf\_lang)\wedge(m1\_subset\_1\ X3\ X0))))\Rightarrow((v1\_funct\_1\ (k2\_zf\_lang1\ X0\ X1\ X2\ X3))\wedge((v1\_funct\_2\ (k2\_zf\_lang1\ X0\ X1\ X2\ X3)\ k1\_zf\_lang\ X0)\wedge (m1\_subset\_1\ (k2\_zf\_lang1\ X0\ X1\ X2\ X3)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang\ X0)))))) \tag{6}$$

Assume the following.

$$m1\_subset\_1\ k1\_zf\_lang\ (k1\_zfmisc\_1\ k5\_numbers) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k1\_zf\_lang)\wedge((v1\_zf\_lang\ X1)\wedge(m1\_finseq\_1\ X1\ k5\_numbers)))\Rightarrow((v1\_zf\_lang\ (k13\_zf\_lang\ X0\ X1))\wedge(m2\_finseq\_1\ (k13\_zf\_lang\ X0\ X1)\ k5\_numbers)) \tag{8}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((v1\_zf\_lang\ X1)\wedge(m2\_finseq\_1\ X1\ k5\_numbers))\Rightarrow((r2\_zf\_model\ X0\ X1)\Leftrightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ k1\_zf\_lang\ X0)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_zf\_lang\ X0)))))\Rightarrow(r1\_zf\_model\ X0\ X2\ X1)))) \tag{9}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(v1\_xboole\_0\ X1)) \tag{10}$$

**Theorem 1**

$$\forall X0.((v1\_zf\_lang\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.(m2\_subset\_1\ X1\ k5\_numbers\ k1\_zf\_lang)\Rightarrow(\forall X2.(\neg v1\_xboole\_0\ X2)\Rightarrow((r2\_zf\_model\ X2\ X0)\Rightarrow(r2\_zf\_model\ X2\ (k13\_zf\_lang\ X1\ X0)))))$$