t9_zf_lang1 (TMb68v7Q8CtMuSbZPmPcaRuBqAAnuwMBsSu)

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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 $k23\_zf\_lang : \iota \Rightarrow \iota$ be given. Let $k13\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k24\_zf\_lang : \iota \Rightarrow \iota$ be given. Let $v8\_zf\_lang : \iota \Rightarrow o$ be given. Let $k10\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v9\_zf\_lang : \iota \Rightarrow o$ be given. Let $k11\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v10\_zf\_lang : \iota \Rightarrow o$ be given. Let $k12\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v11\_zf\_lang : \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np\_\_5 : \iota$ be given. Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow ((\neg (v8\_zf\_lang\ X0) \wedge (\forall X1.((v1\_zf\_lang\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \Rightarrow (\forall X2.((v1\_zf\_lang\ X2) \wedge (m2\_finseq\_1\ X2\ k5\_numbers)) \Rightarrow (X0 \neq k10\_zf\_lang\ X1\ X2)))) \wedge (((\exists X1.((v1\_zf\_lang\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \wedge (\exists X2.((v1\_zf\_lang\ X2) \wedge (m2\_finseq\_1\ X2\ k5\_numbers)) \wedge (X0 = k10\_zf\_lang\ X1\ X2))) \Rightarrow (v8\_zf\_lang\ X0)) \wedge ((\neg (v9\_zf\_lang\ X0) \wedge (\forall X1.((v1\_zf\_lang\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \Rightarrow (\forall X2.((v1\_zf\_lang\ X2) \wedge (m2\_finseq\_1\ X2\ k5\_numbers)) \Rightarrow (X0 \neq k11\_zf\_lang\ X1\ X2)))) \wedge (((\exists X1.((v1\_zf\_lang\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \wedge (\exists X2.((v1\_zf\_lang\ X2) \wedge (m2\_finseq\_1\ X2\ k5\_numbers)) \wedge (X0 = k11\_zf\_lang\ X1\ X2))) \Rightarrow (v9\_zf\_lang\ X0)) \wedge ((\neg (v10\_zf\_lang\ X0) \wedge (\forall X1.((v1\_zf\_lang\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \Rightarrow (\forall X2.((v1\_zf\_lang\ X2) \wedge (m2\_finseq\_1\ X2\ k5\_numbers)) \Rightarrow (X0 \neq k12\_zf\_lang\ X1\ X2)))) \wedge (((\exists X1.((v1\_zf\_lang\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \wedge (\exists X2.((v1\_zf\_lang\ X2) \wedge (m2\_finseq\_1\ X2\ k5\_numbers)) \wedge (X0 = k12\_zf\_lang\ X1\ X2))) \Rightarrow (v10\_zf\_lang\ X0)) \wedge ((\neg (v11\_zf\_lang\ X0) \wedge (\forall X1.(m2\_subset\_1\ X1\ k5\_numbers\ k1\_zf\_lang) \Rightarrow (\forall X2.((v1\_zf\_lang\ X2) \wedge (m2\_finseq\_1\ X2\ k5\_numbers)) \Rightarrow (X0 \neq k13\_zf\_lang\ X1\ X2)))) \wedge ((\exists X1.(m2\_subset\_1\ X1\ k5\_numbers\ k1\_zf\_lang) \wedge (\exists X2.((v1\_zf\_lang\ X2) \wedge (m2\_finseq\_1\ X2\ k5\_numbers)) \wedge (X0 = k13\_zf\_lang\ X1\ X2))) \Rightarrow (v11\_zf\_lang\ X0))))))))) \tag{1}$$

Assume the following.

$$\forall X0.(m2\_subset\_1\ X0\ k5\_numbers\ k1\_zf\_lang)\Rightarrow(\forall X1.((v1\_zf\_lang\ X1)\wedge(m2\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(\forall X2.((v1\_zf\_lang\ X2)\wedge(m2\_finseq\_1\ X2\ k5\_numbers))\Rightarrow((v11\_zf\_lang\ X1)\Rightarrow((\neg(X0 = k23\_zf\_lang\ X1)\wedge(\forall X3.((v1\_zf\_lang\ X3)\wedge(m2\_finseq\_1\ X3\ k5\_numbers))\Rightarrow(k13\_zf\_lang\ X0\ X3\neq X1)))\wedge(((\exists X3.((v1\_zf\_lang\ X3)\wedge(m2\_finseq\_1\ X3\ k5\_numbers))\wedge(k13\_zf\_lang\ X0\ X3 = X1))\Rightarrow(X0 = k23\_zf\_lang\ X1))\wedge((\neg(X2 = k24\_zf\_lang\ X1)\wedge(\forall X3.(m2\_subset\_1\ X3\ k5\_numbers\ k1\_zf\_lang)\Rightarrow(k13\_zf\_lang\ X3\ X2\neq X1)))\wedge((\exists X3.(m2\_subset\_1\ X3\ k5\_numbers\ k1\_zf\_lang)\wedge(k13\_zf\_lang\ X3\ X2 = X1))\Rightarrow(X2 = k24\_zf\_lang\ X1)))))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0)\wedge((\neg v1\_xboole\_0\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))))\Rightarrow(\forall X2.(m2\_subset\_1\ X2\ X0\ X1)\Leftrightarrow(m1\_subset\_1\ X2\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0)\Leftrightarrow(m1\_finseq\_1\ X1\ X0) \tag{4}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{5}$$

Assume the following.

$$\neg v1\_xboole\_0\ k1\_zf\_lang \tag{6}$$

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.

$$k1\_zf\_lang = ReplSep\ (toset\ (\lambda X0 : \iota.m1\_subset\_1\ X0\ k5\_numbers))\ (\lambda X0 : \iota.r1\_xxreal\_0\ np\_\_5\ X0)\ (\lambda X0 : \iota.X0) \tag{9}$$

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

$$\forall X0.((v1\_zf\_lang\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.(m2\_subset\_1\ X1\ k5\_numbers\ k1\_zf\_lang)\Rightarrow((k23\_zf\_lang\ (k13\_zf\_lang\ X1\ X0) = X1)\wedge(k24\_zf\_lang\ (k13\_zf\_lang\ X1\ X0) = X0)))$$