t160_zf_lang1 (TMPNbnEsmstqM-TacBYMC3QFyDpFXG5bjit7)

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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 $k8\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_zf\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k5\_zf\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\forall X0.(m2\_finseq\_1\ X0\ k5\_numbers) \Rightarrow (\forall X1.(m2\_finseq\_1\ X1\ k5\_numbers) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ k5\_numbers\ k1\_zf\_lang) \Rightarrow (\forall X3.(m2\_subset\_1\ X3\ k5\_numbers\ k1\_zf\_lang) \Rightarrow ((k8\_zf\_lang\ X2\ X0 = k8\_zf\_lang\ X3\ X1) \Rightarrow ((X2 = X3) \wedge (X0 = X1)))))) \tag{1}$$

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.

$$\forall X0.\forall X1.\forall X2.(((v1\_zf\_lang\ X0) \wedge (m1\_finseq\_1\ X0\ k5\_numbers)) \wedge ((m1\_subset\_1\ X1\ k1\_zf\_lang) \wedge (m1\_subset\_1\ X2\ k1\_zf\_lang))) \Rightarrow (k6\_zf\_lang1\ X0\ X1\ X2 = k5\_zf\_lang1\ X0\ X1\ X2) \tag{4}$$

Assume the following.

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

Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.((v1\_zf\_lang\ X1)\wedge(m2\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(\forall X2.(m2\_subset\_1\ X2\ k5\_numbers\ k1\_zf\_lang)\Rightarrow(\forall X3.(m2\_subset\_1\ X3\ k5\_numbers\ k1\_zf\_lang)\Rightarrow(\forall X4.(m2\_subset\_1\ X4\ k5\_numbers\ k1\_zf\_lang)\Rightarrow(\forall X5.(m2\_subset\_1\ X5\ k5\_numbers\ k1\_zf\_lang)\Rightarrow((X0 = k5\_zf\_lang1\ X1\ X2\ X3)\Rightarrow(((\neg(X4 = X5)\wedge(X5\neq X2))\wedge(\neg(X4 = X3)\wedge(X5 = X2)))\vee(k8\_zf\_lang\ X4\ X0 = k5\_zf\_lang1\ (k8\_zf\_lang\ X5\ X1)\ X2\ X3)))))))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k1\_zf\_lang)\wedge((v1\_zf\_lang\ X1)\wedge(m1\_finseq\_1\ X1\ k5\_numbers)))\Rightarrow(v1\_zf\_lang\ (k8\_zf\_lang\ X0\ X1)) \tag{7}$$

Assume the following.

$$\neg v1\_xboole\_0\ k1\_zf\_lang \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k1\_zf\_lang)\wedge(m1\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(m2\_finseq\_1\ (k8\_zf\_lang\ X0\ X1)\ k5\_numbers) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((v1\_zf\_lang\ X0)\wedge(m1\_finseq\_1\ X0\ k5\_numbers))\wedge((m1\_subset\_1\ X1\ k1\_zf\_lang)\wedge(m1\_subset\_1\ X2\ k1\_zf\_lang)))\Rightarrow((v1\_zf\_lang\ (k6\_zf\_lang1\ X0\ X1\ X2))\wedge(m2\_finseq\_1\ (k6\_zf\_lang1\ X0\ X1\ X2)\ k5\_numbers)) \tag{10}$$

Assume the following.

$$m1\_subset\_1\ k1\_zf\_lang\ (k1\_zfmisc\_1\ k5\_numbers) \tag{11}$$

Assume the following.

$$k1\_zf\_lang = ReplSep\ (toset\ (\lambda X0 : \iota.m1\_subset\_1\ X0\ k5\_numbers))\ (\lambda X0 : \iota.r1\_xxreal\_0\ np\_\_5\ X0)\ (\lambda X0 : \iota.X0) \tag{12}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(v1\_xboole\_0\ X1)) \tag{13}$$

Theorem 1

$$\forall X0.((v1\_zf\_lang\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.((v1\_zf\_lang\ X1)\wedge(m2\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(\forall X2.(m2\_subset\_1\ X2\ k5\_numbers\ k1\_zf\_lang)\Rightarrow(\forall X3.(m2\_subset\_1\ X3\ k5\_numbers\ k1\_zf\_lang)\Rightarrow((k8\_zf\_lang\ X2\ X0 = k6\_zf\_lang1\ (k8\_zf\_lang\ X3\ X1)\ X3\ X2)\Leftrightarrow(X0 = k6\_zf\_lang1\ X1\ X3\ X2)))))$$