t57_abcmiz_0 (TMQ88eNrebn43DXdoKbDdHNeF4LTXo4xEK9)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v3\_orders\_2 : \iota \Rightarrow o$ be given. Let $v4\_orders\_2 : \iota \Rightarrow o$ be given. Let $v4\_abcmiz\_0 : \iota \Rightarrow o$ be given. Let $l3\_abcmiz\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_abcmiz\_0 : \iota \Rightarrow \iota$ be given. Let $r5\_abcmiz\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r3\_abcmiz\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l2\_abcmiz\_0 : \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k4\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_abcmiz\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r4\_abcmiz\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10\_abcmiz\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_abcmiz\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(l3\_abcmiz\_0\ X0) \Rightarrow (l2\_abcmiz\_0\ X0) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v3\_orders\_2\ X0) \wedge ((v4\_orders\_2\ X0) \wedge ((\neg v4\_abcmiz\_0\ X0) \wedge (l3\_abcmiz\_0\ X0))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m2\_finseq\_1\ X2\ (u1\_abcmiz\_0\ X0)) \Rightarrow ((r5\_abcmiz\_0\ X0\ X1\ X2) \Leftrightarrow (\forall X3.(v7\_ordinal1\ X3) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (u1\_abcmiz\_0\ X0)) \Rightarrow (\forall X5.(m1\_subset\_1\ X5\ (u1\_struct\_0\ X0)) \Rightarrow (((X3 \in k4\_finseq\_1\ X2) \wedge ((X4 = k1\_funct\_1\ X2\ X3) \wedge (X5 = k1\_funct\_1\ (k7\_abcmiz\_0\ X0\ X1\ X2)\ X3))) \Rightarrow (r4\_abcmiz\_0\ X0\ X5\ X4)))))))) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((\neg v4\_abcmiz\_0\ X0) \wedge (l3\_abcmiz\_0\ X0))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_abcmiz\_0\ X0)) \Rightarrow ((r4\_abcmiz\_0\ X0\ X1\ X2) \Leftrightarrow ((r1\_orders\_2\ X0\ X1\ (k10\_abcmiz\_0\ X0\ X2)) \wedge (r1\_abcmiz\_0\ X0\ X1\ X2))))) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge((\neg v4\_abcmiz\_0\ X0)\wedge(l2\_abcmiz\_0\ X0)))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m2\_finseq\_1\ X2\ (u1\_abcmiz\_0\ X0))\Rightarrow((r3\_abcmiz\_0\ X0\ X1\ X2)\Leftrightarrow(\forall X3.(v7\_ordinal1\ X3)\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ (u1\_abcmiz\_0\ X0))\Rightarrow(\forall X5.(m1\_subset\_1\ X5\ (u1\_struct\_0\ X0))\Rightarrow(((X3\in k4\_finseq\_1\ X2)\wedge((X4=k1\_funct\_1\ X2\ X3)\wedge(X5=k1\_funct\_1\ (k7\_abcmiz\_0\ X0\ X1\ X2)\ X3)))\Rightarrow(r1\_abcmiz\_0\ X0\ X5\ X4)))))))) \tag{4}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge((\neg v4\_abcmiz\_0\ X0)\wedge(l3\_abcmiz\_0\ X0)))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m2\_finseq\_1\ X2\ (u1\_abcmiz\_0\ X0))\Rightarrow((r5\_abcmiz\_0\ X0\ X1\ X2)\Rightarrow(r3\_abcmiz\_0\ X0\ X1\ X2))))$$