l53_o_ring_1 (TMVNFtxPwghKsKNhVxeRxtnry-wgQgbv8BqJ)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l6\_algstr\_0 : \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v8\_o\_ring\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v12\_o\_ring\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5\_o\_ring\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v9\_o\_ring\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l6\_algstr\_0\ X0)) \Rightarrow (\forall X1.\ (m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow ((v5\_o\_ring\_1\ X1\ X1\ X0) \Rightarrow (v9\_o\_ring\_1\ X1\ X1\ X0))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Rightarrow ((v1\_funct\_1\ X1) \wedge ((v1\_finseq\_1\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ X0))))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1\_relat\_1\ X1) \wedge ((v5\_relat\_1\ X1\ X1\ X0) \wedge (v1\_funct\_1\ X1))) \Rightarrow (m1\_subset\_1\ (k7\_partfun1\ X0\ X1\ X1\ X2)\ X0) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l6\_algstr\_0\ X0))\Rightarrow(\forall X1.\ (m2\_finseq\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow((v8\_o\_ring\_1\ X1\ X0)\Leftrightarrow((k3\_finseq\_1\ X1{\neq}k6\_numbers)\wedge(\forall X2.(v7\_ordinal1\ X2)\Rightarrow(\neg(X2{\neq}k6\_numbers)\wedge((r1\_xxreal\_0\ X2\ (k3\_finseq\_1\ X1))\wedge((\neg v5\_o\_ring\_1\ (k7\_partfun1\ (u1\_struct\_0\ X0)\ X1\ X2)\ X0)\wedge(\forall X3.(v7\_ordinal1\ X3)\Rightarrow(\forall X4.\ (v7\_ordinal1\ X4)\Rightarrow(\neg(k7\_partfun1\ (u1\_struct\_0\ X0)\ X1\ X2 = k6\_algstr\_0\ X0\ (k7\_partfun1\ (u1\_struct\_0\ X0)\ X1\ X3)\ (k7\_partfun1\ (u1\_struct\_0\ X0)\ X1\ X4))\wedge((X3{\neq}k6\_numbers)\wedge((\neg r1\_xxreal\_0\ X2\ X3)\wedge((X4{\neq}k6\_numbers)\wedge(\neg r1\_xxreal\_0\ X2\ X4))))))))))))))) \tag{4}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l6\_algstr\_0\ X0))\Rightarrow(\forall X1.\ (m2\_finseq\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow((v12\_o\_ring\_1\ X1\ X0)\Leftrightarrow((k3\_finseq\_1\ X1{\neq}k6\_numbers)\wedge(\forall X2.(v7\_ordinal1\ X2)\Rightarrow(\neg(X2{\neq}k6\_numbers)\wedge((r1\_xxreal\_0\ X2\ (k3\_finseq\_1\ X1))\wedge((\neg v9\_o\_ring\_1\ (k7\_partfun1\ (u1\_struct\_0\ X0)\ X1\ X2)\ X0)\wedge(\forall X3.(v7\_ordinal1\ X3)\Rightarrow(\forall X4.\ (v7\_ordinal1\ X4)\Rightarrow(\neg((k7\_partfun1\ (u1\_struct\_0\ X0)\ X1\ X2 = k6\_algstr\_0\ X0\ (k7\_partfun1\ (u1\_struct\_0\ X0)\ X1\ X3)\ (k7\_partfun1\ (u1\_struct\_0\ X0)\ X1\ X4))\vee(k7\_partfun1\ (u1\_struct\_0\ X0)\ X1\ X2 = k1\_algstr\_0\ X0\ (k7\_partfun1\ (u1\_struct\_0\ X0)\ X1\ X3)\ (k7\_partfun1\ (u1\_struct\_0\ X0)\ X1\ X4)))\wedge((X3{\neq}k6\_numbers)\wedge((\neg r1\_xxreal\_0\ X2\ X3)\wedge((X4{\neq}k6\_numbers)\wedge(\neg r1\_xxreal\_0\ X2\ X4))))))))))))))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow((v4\_relat\_1\ X2\ X0)\wedge(v5\_relat\_1\ X2\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \tag{7}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l6\_algstr\_0\ X0))\Rightarrow(\forall X1.\ (m2\_finseq\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow((v8\_o\_ring\_1\ X1\ X0)\Rightarrow(v12\_o\_ring\_1\ X1\ X0)))$$