l17_uniroots (TMatUNkT-FgecWdNzF4YCXs7ycHGJwvyVwxj)

October 27, 2020

Let $v8\_struct\_0 : \iota \Rightarrow o$ be given. Let $k18\_mod\_2 : \iota$ 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 $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $g6\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l6\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l2\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l5\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v36\_algstr\_0 : \iota \Rightarrow o$ be given. Let $k17\_mod\_2 : \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k16\_mod\_2 : \iota$ be given. Let $k14\_mod\_2 : \iota$ be given. Let $k13\_mod\_2 : \iota$ be given. Let $u1\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $u2\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $u3\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $u2\_struct\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)))))\wedge(((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k2\_zfmisc\_1\ X0\ X0)\ X0)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)\ X0)))))\wedge((m1\_subset\_1\ X3\ X0)\wedge(m1\_subset\_1\ X4\ X0))))\Rightarrow(\forall X5.\forall X6.\forall X7.\forall X8.\forall X9.(g6\_algstr\_0\ X0\ X1\ X2\ X3\ X4 = g6\_algstr\_0\ X5\ X6\ X7\ X8\ X9)\Rightarrow((X0 = X5)\wedge((X1 = X6)\wedge((X2 = X7)\wedge((X3 = X8)\wedge(X4 = X9))))))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v8\_struct\_0\ X0)\wedge(l1\_struct\_0\ X0))\Rightarrow(\neg v1\_finset\_1\ (u1\_struct\_0\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.v1\_finset\_1\ (k1\_enumset1\ X0\ X1\ X2) \tag{3}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0)\Rightarrow((l2\_algstr\_0\ X0)\wedge(l5\_algstr\_0\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.(l2\_algstr\_0\ X0) \Rightarrow ((l2\_struct\_0\ X0) \wedge (l1\_algstr\_0\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_algstr\_0\ X0) \Rightarrow (l1\_struct\_0\ X0) \tag{6}$$

Assume the following.

$$(v36\_algstr\_0\ k18\_mod\_2) \wedge (l6\_algstr\_0\ k18\_mod\_2) \tag{7}$$

Assume the following.

$$m1\_subset\_1\ k17\_mod\_2\ (k1\_enumset1\ k6\_numbers\ np\_\_1\ np\_\_2) \tag{8}$$

Assume the following.

$$m1\_subset\_1\ k16\_mod\_2\ (k1\_enumset1\ k6\_numbers\ np\_\_1\ np\_\_2) \tag{9}$$

Assume the following.

$$\begin{gathered}(v1\_funct\_1\ k14\_mod\_2) \wedge ((v1\_funct\_2\ k14\_mod\_2\ (k2\_zfmisc\_1 \\ (k1\_enumset1\ k6\_numbers\ np\_\_1\ np\_\_2)\ (k1\_enumset1\ k6\_numbers \\ np\_\_1\ np\_\_2))\ (k1\_enumset1\ k6\_numbers\ np\_\_1\ np\_\_2)) \wedge (m1\_subset\_1 \\ k14\_mod\_2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ (k1\_enumset1 \\ k6\_numbers\ np\_\_1\ np\_\_2)\ (k1\_enumset1\ k6\_numbers\ np\_\_1\ np\_\_2)) \\ (k1\_enumset1\ k6\_numbers\ np\_\_1\ np\_\_2)))))\end{gathered} \tag{10}$$

Assume the following.

$$\begin{gathered}(v1\_funct\_1\ k13\_mod\_2) \wedge ((v1\_funct\_2\ k13\_mod\_2\ (k2\_zfmisc\_1 \\ (k1\_enumset1\ k6\_numbers\ np\_\_1\ np\_\_2)\ (k1\_enumset1\ k6\_numbers \\ np\_\_1\ np\_\_2))\ (k1\_enumset1\ k6\_numbers\ np\_\_1\ np\_\_2)) \wedge (m1\_subset\_1 \\ k13\_mod\_2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k2\_zfmisc\_1\ (k1\_enumset1 \\ k6\_numbers\ np\_\_1\ np\_\_2)\ (k1\_enumset1\ k6\_numbers\ np\_\_1\ np\_\_2)) \\ (k1\_enumset1\ k6\_numbers\ np\_\_1\ np\_\_2)))))\end{gathered} \tag{11}$$

Assume the following.

$$\begin{gathered}k18\_mod\_2 = g6\_algstr\_0\ (k1\_enumset1\ k6\_numbers\ np\_\_1\ np\_\_2)\ k13\_mod\_2 \\ k14\_mod\_2\ k16\_mod\_2\ k17\_mod\_2\end{gathered} \tag{12}$$

Assume the following.

$$\begin{gathered}\forall X0.(l6\_algstr\_0\ X0) \Rightarrow ((v36\_algstr\_0\ X0) \Rightarrow (X0 = g6\_algstr\_0 \\ (u1\_struct\_0\ X0)\ (u1\_algstr\_0\ X0)\ (u2\_algstr\_0\ X0)\ (u3\_struct\_0 \\ X0)\ (u2\_struct\_0\ X0)))\end{gathered} \tag{13}$$

Theorem 1 $v8\_struct\_0\ k18\_mod\_2$.