t39_uniroots (TMP-wBMC8MxKx6EM8SEjLPXawf5cb4ZtXdv2)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v6\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $l6\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_uniroots : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k2\_funct\_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15\_funct\_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $l2\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l5\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l4\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l4\_struct\_0 : \iota \Rightarrow o$ be given. Let $l3\_struct\_0 : \iota \Rightarrow o$ be given. Let $l3\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_algstr\_0 : \iota \Rightarrow o$ be given. Let $k9\_polynom3 : \iota \Rightarrow \iota$ be given. Let $k4\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_group\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(X1 \in X0) \Rightarrow (k1\_funct\_1\ (k2\_funcop\_1\ X0\ X2)\ X1 = X2) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (\forall X1.\forall X2.\ \forall X3.(X2 \neq X3) \Rightarrow (k1\_funct\_1\ (k2\_funct\_7\ X0\ X2\ X1)\ X3 = k1\_funct\_1\ X0\ X3)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0) \wedge (m1\_subset\_1\ X2\ X0)) \Rightarrow (k8\_funcop\_1\ X0\ X1\ X2 = k2\_funcop\_1\ X1\ X2) \tag{3}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X0\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))))\wedge(m1\_subset\_1\ X4\ X1))\Rightarrow(k15\_funct\_7\ X0\ X1\ X2\ X3\ X4 = k2\_funct\_7\ X2\ X3\ X4) \tag{5}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_struct\_0\ X0))\Rightarrow(\neg v1\_xboole\_0\ (u1\_struct\_0\ X0)) \tag{6}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0)\Rightarrow((l2\_algstr\_0\ X0)\wedge(l5\_algstr\_0\ X0)) \tag{7}$$

Assume the following.

$$\forall X0.(l5\_algstr\_0\ X0)\Rightarrow((l4\_algstr\_0\ X0)\wedge(l4\_struct\_0\ X0)) \tag{8}$$

Assume the following.

$$\forall X0.(l4\_algstr\_0\ X0)\Rightarrow((l3\_struct\_0\ X0)\wedge(l3\_algstr\_0\ X0)) \tag{9}$$

Assume the following.

$$\forall X0.(l3\_algstr\_0\ X0)\Rightarrow(l1\_struct\_0\ X0) \tag{10}$$

Assume the following.

$$\forall X0.(l2\_algstr\_0\ X0)\Rightarrow((l2\_struct\_0\ X0)\wedge(l1\_algstr\_0\ X0)) \tag{11}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l2\_struct\_0\ X0))\Rightarrow((v1\_funct\_1\ (k9\_polynom3\ X0))\wedge((v1\_funct\_2\ (k9\_polynom3\ X0)\ k5\_numbers\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ (k9\_polynom3\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (u1\_struct\_0\ X0))))))) \tag{12}$$

Assume the following.

$$\forall X0.(l2\_struct\_0\ X0)\Rightarrow(m1\_subset\_1\ (k4\_struct\_0\ X0)\ (u1\_struct\_0\ X0)) \tag{13}$$

Assume the following.

$$\forall X0.\forall X1.((l2\_algstr\_0\ X0)\wedge(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)))\Rightarrow(m1\_subset\_1\ (k4\_algstr\_0\ X0\ X1)\ (u1\_struct\_0\ X0)) \tag{14}$$

Assume the following.

$$\forall X0.(l3\_algstr\_0\ X0)\Rightarrow(m1\_subset\_1\ (k1\_group\_1\ X0)\ (u1\_struct\_0\ X0)) \tag{15}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X0\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))))\wedge(m1\_subset\_1\ X4\ X1))\Rightarrow((v1\_funct\_1\ (k15\_funct\_7\ X0\ X1\ X2\ X3\ X4))\wedge((v1\_funct\_2\ (k15\_funct\_7\ X0\ X1\ X2\ X3\ X4)\ X0\ X1)\wedge(m1\_subset\_1\ (k15\_funct\_7\ X0\ X1\ X2\ X3\ X4)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))) \tag{16}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l2\_struct\_0\ X0))\Rightarrow(k9\_polynom3\ X0 = k8\_funcop\_1\ (u1\_struct\_0\ X0)\ k5\_numbers\ (k4\_struct\_0\ X0)) \tag{17}$$

Assume the following.

$$\forall X0.((v7\_ordinal1\ X0)\wedge(\neg v1\_xboole\_0\ X0))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v6\_vectsp\_1\ X1)\wedge(l6\_algstr\_0\ X1)))\Rightarrow(k4\_uniroots\ X0\ X1 = k15\_funct\_7\ k5\_numbers\ (u1\_struct\_0\ X1)\ (k15\_funct\_7\ k5\_numbers\ (u1\_struct\_0\ X1)\ (k9\_polynom3\ X1)\ k6\_numbers\ (k4\_algstr\_0\ X1\ (k1\_group\_1\ X1)))\ X0\ (k1\_group\_1\ X1))) \tag{18}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Leftrightarrow(X0 \in k4\_ordinal1) \tag{19}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \tag{20}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v6\_vectsp\_1\ X0)\wedge(l6\_algstr\_0\ X0)))\Rightarrow(\forall X1.((v7\_ordinal1\ X1)\wedge(\neg v1\_xboole\_0\ X1))\Rightarrow(\forall X2.(v7\_ordinal1\ X2)\Rightarrow(\neg(X2{\neq}k6\_numbers)\wedge((X2{\neq}X1)\wedge(k1\_funct\_1\ (k4\_uniroots\ X1\ X0)\ X2{\neq}k4\_struct\_0\ X0))))))$$