t23_ratfunc1 (TMaQ-DoMcZ4bXRmnzAGHz9YkSKFTS5VMjfjH)

October 27, 2020

Let $v7\_struct\_0 : \iota \Rightarrow o$ be given. Let $v13\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v33\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v3\_group\_1 : \iota \Rightarrow o$ be given. Let $v5\_group\_1 : \iota \Rightarrow o$ be given. Let $v4\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $v5\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $v2\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v3\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v4\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v1\_vectsp\_2 : \iota \Rightarrow o$ be given. Let $l6\_algstr\_0 : \iota \Rightarrow o$ be given. Let $k11\_ratfunc1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_ratfunc1 : \iota \Rightarrow \iota$ be given. Let $v6\_struct\_0 : \iota \Rightarrow o$ be given. Let $l5\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v4\_ratfunc1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l2\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l4\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l4\_struct\_0 : \iota \Rightarrow o$ be given. Let $l2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $m1\_ratfunc1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k5\_numbers : \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_algseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_ratfunc1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_ratfunc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13\_polynom3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_ratfunc1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_ratfunc1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5\_ratfunc1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_ratfunc1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k14\_polynom3 : \iota \Rightarrow \iota$ be given. Let $k3\_group\_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $r1\_ratfunc1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_hurwitz : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v3\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $v6\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $v1\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $v2\_vectsp\_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v6\_struct\_0\ X0) \wedge (l5\_algstr\_0\ X0)) \Rightarrow (v4\_ratfunc1\ (k7\_ratfunc1\ X0)\ X0) \tag{1}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0) \Rightarrow ((l2\_algstr\_0\ X0) \wedge (l5\_algstr\_0\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.(l5\_algstr\_0\ X0) \Rightarrow ((l4\_algstr\_0\ X0) \wedge (l4\_struct\_0\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(l2\_algstr\_0\ X0)\Rightarrow((l2\_struct\_0\ X0)\wedge(l1\_algstr\_0\ X0)) \tag{4}$$

Assume the following.

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

Assume the following.

$$\forall X0.((\neg v6\_struct\_0\ X0)\wedge(l5\_algstr\_0\ X0))\Rightarrow(m1\_ratfunc1\ (k7\_ratfunc1\ X0)\ X0) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v7\_struct\_0\ X0)\wedge((v13\_algstr\_0\ X0)\wedge((v33\_algstr\_0\ X0)\wedge((v3\_group\_1\ X0)\wedge((v5\_group\_1\ X0)\wedge((v4\_vectsp\_1\ X0)\wedge((v5\_vectsp\_1\ X0)\wedge((v2\_rlvect\_1\ X0)\wedge((v3\_rlvect\_1\ X0)\wedge((v4\_rlvect\_1\ X0)\wedge((v1\_vectsp\_2\ X0)\wedge(l6\_algstr\_0\ X0))))))))))))\wedge(m1\_ratfunc1\ X1\ X0))\Rightarrow(m1\_ratfunc1\ (k11\_ratfunc1\ X0\ X1)\ X0) \tag{7}$$

Assume the following.

$$\forall X0.((\neg v7\_struct\_0\ X0)\wedge((v13\_algstr\_0\ X0)\wedge((v33\_algstr\_0\ X0)\wedge((v3\_group\_1\ X0)\wedge((v5\_group\_1\ X0)\wedge((v4\_vectsp\_1\ X0)\wedge((v5\_vectsp\_1\ X0)\wedge((v2\_rlvect\_1\ X0)\wedge((v3\_rlvect\_1\ X0)\wedge((v4\_rlvect\_1\ X0)\wedge((v1\_vectsp\_2\ X0)\wedge(l6\_algstr\_0\ X0))))))))))))\Rightarrow(\forall X1.(m1\_ratfunc1\ X1\ X0)\Rightarrow(\forall X2.(m1\_ratfunc1\ X2\ X0)\Rightarrow(((\neg v4\_ratfunc1\ X1\ X0)\Rightarrow((X2 = k11\_ratfunc1\ X0\ X1)\Leftrightarrow(\exists X3.(m1\_ratfunc1\ X3\ X0)\wedge(\exists X4.((v1\_funct\_1\ X4)\wedge((v1\_funct\_2\ X4\ k5\_numbers\ (u1\_struct\_0\ X0))\wedge((v1\_algseq\_1\ X4\ X0)\wedge((\neg v1\_ratfunc1\ X4\ X0)\wedge(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (u1\_struct\_0\ X0))))))))\wedge((X1 = k3\_ratfunc1\ X0\ (k13\_polynom3\ X0\ X4\ (k4\_ratfunc1\ X0\ X3))\ (k13\_polynom3\ X0\ X4\ (k5\_ratfunc1\ X0\ X3)))\wedge((v5\_ratfunc1\ X3\ X0)\wedge((X2 = k6\_ratfunc1\ X0\ X3)\wedge(\exists X5.(m2\_finseq\_1\ X5\ (u1\_struct\_0\ (k14\_polynom3\ X0)))\wedge((X4 = k3\_group\_4\ (k14\_polynom3\ X0)\ X5)\wedge(\forall X6.(m1\_subset\_1\ X6\ k5\_numbers)\Rightarrow(\neg(X6 \in k4\_finseq\_1\ X5)\wedge(\forall X7.(m1\_subset\_1\ X7\ (u1\_struct\_0\ X0))\Rightarrow(\neg(r1\_ratfunc1\ X0\ (k4\_ratfunc1\ X0\ X1)\ (k5\_ratfunc1\ X0\ X1)\ X7)\wedge(k1\_funct\_1\ X5\ X6 = k3\_hurwitz\ X0\ X7\ np\_\_1))))))))))))\wedge((v4\_ratfunc1\ X1\ X0)\Rightarrow((X2 = k11\_ratfunc1\ X0\ X1)\Leftrightarrow(X2 = k7\_ratfunc1\ X0)))))) \tag{8}$$

Assume the following.

$$\forall X0.(l4\_algstr\_0\ X0)\Rightarrow(((\neg v2\_struct\_0\ X0)\wedge(v4\_vectsp\_1\ X0))\Rightarrow((\neg v2\_struct\_0\ X0)\wedge((v3\_vectsp\_1\ X0)\wedge(v6\_vectsp\_1\ X0)))) \tag{9}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0)\Rightarrow(((\neg v2\_struct\_0\ X0)\wedge(v5\_vectsp\_1\ X0))\Rightarrow((\neg v2\_struct\_0\ X0)\wedge((v1\_vectsp\_1\ X0)\wedge(v2\_vectsp\_1\ X0)))) \tag{10}$$

Assume the following.

$$\forall X0.(l1\_struct\_0\ X0) \Rightarrow ((v2\_struct\_0\ X0) \Rightarrow (v7\_struct\_0\ X0)) \tag{11}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0) \Rightarrow (((\neg v2\_struct\_0\ X0) \wedge ((v6\_struct\_0\ X0) \wedge ((v13\_algstr\_0\ X0) \wedge ((v1\_vectsp\_1\ X0) \wedge ((v3\_vectsp\_1\ X0) \wedge ((v3\_rlvect\_1\ X0) \wedge (v4\_rlvect\_1\ X0)))))) \Rightarrow ((\neg v2\_struct\_0\ X0) \wedge ((v7\_struct\_0\ X0) \wedge ((v13\_algstr\_0\ X0) \wedge ((v1\_vectsp\_1\ X0) \wedge ((v3\_vectsp\_1\ X0) \wedge ((v3\_rlvect\_1\ X0) \wedge (v4\_rlvect\_1\ X0))))))) \tag{12}$$

Theorem 1

$$\forall X0.((\neg v7\_struct\_0\ X0) \wedge ((v13\_algstr\_0\ X0) \wedge ((v33\_algstr\_0\ X0) \wedge ((v3\_group\_1\ X0) \wedge ((v5\_group\_1\ X0) \wedge ((v4\_vectsp\_1\ X0) \wedge ((v5\_vectsp\_1\ X0) \wedge ((v2\_rlvect\_1\ X0) \wedge ((v3\_rlvect\_1\ X0) \wedge ((v4\_rlvect\_1\ X0) \wedge ((v1\_vectsp\_2\ X0) \wedge (l6\_algstr\_0\ X0))))))))))) \Rightarrow (k11\_ratfunc1\ X0\ (k7\_ratfunc1\ X0) = k7\_ratfunc1\ X0)$$