t9_complfld (TMbFAMSHYA15oQN9jp9EFY9DLTxe1fkt4se)

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Let $k3\_rlvect\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_complfld : \iota$ be given. Let $k1\_group\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $np\_\_2 : \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $np\_\_1 : \iota$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_complex1 : \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v2\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $l1\_algstr\_0 : \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k3\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_complex1 : \iota$ be given. Let $v6\_struct\_0 : \iota \Rightarrow o$ be given. Let $v13\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v33\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v36\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v3\_group\_1 : \iota \Rightarrow o$ be given. Let $v5\_group\_1 : \iota \Rightarrow o$ be given. Let $v3\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $v5\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $v6\_vectsp\_1 : \iota \Rightarrow o$ be given. Let $v3\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v4\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $l6\_algstr\_0 : \iota \Rightarrow o$ 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 $k2\_numbers : \iota$ be given. Let $u1\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $k27\_binop\_2 : \iota$ be given. Let $u2\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $k29\_binop\_2 : \iota$ be given. Let $k5\_struct\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\neg v1\_xboole\_0\ np\_\_2 \tag{1}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_1) \wedge (m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{2}$$

Assume the following.

$$k2\_xcmplx\_0\ np\_\_1\ np\_\_1 = np\_\_2 \tag{3}$$

Assume the following.

$$k5\_complex1 = k1\_xboole\_0 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((v2\_rlvect\_1\ X0)\wedge(l1\_algstr\_0\ X0))\wedge((m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))))\Rightarrow(k3\_rlvect\_1\ X0\ X1\ X2 = k1\_algstr\_0\ X0\ X1\ X2) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow(k3\_binop\_2\ X0\ X1 = k2\_xcmplx\_0\ X0\ X1) \tag{6}$$

Assume the following.

$$k1\_group\_1\ k1\_complfld = k6\_complex1 \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1\_xcmplx\_0\ X0)\wedge((v1\_xcmplx\_0\ X1)\wedge((m1\_subset\_1\ X2\ (u1\_struct\_0\ k1\_complfld))\wedge(m1\_subset\_1\ X3\ (u1\_struct\_0\ k1\_complfld)))))\Rightarrow(((X2 = X0)\wedge(X3 = X1))\Rightarrow(k1\_algstr\_0\ k1\_complfld\ X2\ X3 = k3\_binop\_2\ X0\ X1)) \tag{8}$$

Assume the following.

$$(\neg v6\_struct\_0\ k1\_complfld)\wedge((v13\_algstr\_0\ k1\_complfld)\wedge((v33\_algstr\_0\ k1\_complfld)\wedge((v36\_algstr\_0\ k1\_complfld)\wedge((v3\_group\_1\ k1\_complfld)\wedge((v5\_group\_1\ k1\_complfld)\wedge((v3\_vectsp\_1\ k1\_complfld)\wedge((v5\_vectsp\_1\ k1\_complfld)\wedge((v6\_vectsp\_1\ k1\_complfld)\wedge((v2\_rlvect\_1\ k1\_complfld)\wedge((v3\_rlvect\_1\ k1\_complfld)\wedge(v4\_rlvect\_1\ k1\_complfld))))))))))) \tag{9}$$

Assume the following.

$$v1\_xboole\_0\ k1\_xboole\_0 \tag{10}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0)\Rightarrow((l2\_algstr\_0\ X0)\wedge(l5\_algstr\_0\ X0)) \tag{11}$$

Assume the following.

$$\forall X0.(l2\_algstr\_0\ X0)\Rightarrow((l2\_struct\_0\ X0)\wedge(l1\_algstr\_0\ X0)) \tag{12}$$

Assume the following.

$$m1\_subset\_1\ k6\_complex1\ k2\_numbers \tag{13}$$

Assume the following.

$$(v36\_algstr\_0\ k1\_complfld)\wedge(l6\_algstr\_0\ k1\_complfld) \tag{14}$$

Assume the following.

$$k6\_complex1 = np\_\_1 \tag{15}$$

Assume the following.

$$\forall X0.((v36\_algstr\_0\ X0)\wedge(l6\_algstr\_0\ X0))\Rightarrow((X0 = k1\_complfld)\Leftrightarrow ((u1\_struct\_0\ X0 = k2\_numbers)\wedge((u1\_algstr\_0\ X0 = k27\_binop\_2)\wedge ((u2\_algstr\_0\ X0 = k29\_binop\_2)\wedge((k5\_struct\_0\ X0 = k6\_complex1)\wedge (k4\_struct\_0\ X0 = k5\_complex1)))))) \tag{16}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xcmplx\_0\ X0) \tag{17}$$

Theorem 1

$$k3\_rlvect\_1\ k1\_complfld\ (k1\_group\_1\ k1\_complfld)\ (k1\_group\_1\ k1\_complfld)\neq k4\_struct\_0\ k1\_complfld$$