t24_complfld (TMcGmQmcD-mQGznW4rohUADhqNNQS4URQUSD)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_complfld : \iota$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k3\_vectsp\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k5\_complex1 : \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k6\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k7\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v36\_algstr\_0 : \iota \Rightarrow o$ be given. Let $l6\_algstr\_0 : \iota \Rightarrow o$ be given. Let $k6\_complex1 : \iota$ 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. Assume the following.

$$k4\_struct\_0\ k1\_complfld = k5\_complex1 \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ k1\_complfld)) \Rightarrow (\forall X1.\ (m1\_subset\_1\ X1\ (u1\_struct\_0\ k1\_complfld)) \Rightarrow (\forall X2.(v1\_xcmplx\_0\ X2) \Rightarrow (\forall X3.(v1\_xcmplx\_0\ X3) \Rightarrow (((X0 = X2) \wedge (X1 = X3)) \Rightarrow ((X1 = k4\_struct\_0\ k1\_complfld) \vee (k3\_vectsp\_1\ k1\_complfld\ X0\ X1 = k6\_binop\_2\ X2\ X3))))))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow ((X0 \neq k6\_numbers) \Rightarrow (k7\_xcmplx\_0\ X0\ X0 = np\_\_1)) \tag{3}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (k6\_binop\_2\ X0\ X1 = k7\_xcmplx\_0\ X0\ X1) \tag{5}$$

Assume the following.

$$k5\_complex1 = k1\_xboole\_0 \tag{6}$$

Assume the following.

$$(v36\_algstr\_0\ k1\_complfld)\wedge(l6\_algstr\_0\ k1\_complfld) \tag{7}$$

Assume the following.

$$k6\_complex1 = np\_\_1 \tag{8}$$

Assume the following.

$$\begin{gathered}\forall X0.((v36\_algstr\_0\ X0)\wedge(l6\_algstr\_0\ X0))\Rightarrow((X0 = k1\_complfld)\Leftrightarrow \\ ((u1\_struct\_0\ X0 = k2\_numbers)\wedge((u1\_algstr\_0\ X0 = k27\_binop\_2)\wedge \\ ((u2\_algstr\_0\ X0 = k29\_binop\_2)\wedge((k5\_struct\_0\ X0 = k6\_complex1)\wedge \\ (k4\_struct\_0\ X0 = k5\_complex1))))))\end{gathered} \tag{9}$$

Assume the following.

$$\begin{gathered}\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ k1\_complfld))\Rightarrow(v1\_xcmplx\_0 \\ X0)\end{gathered} \tag{10}$$

Theorem 1

$$\begin{gathered}\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ k1\_complfld))\Rightarrow((X0\neq \\ k4\_struct\_0\ k1\_complfld)\Rightarrow(k3\_vectsp\_1\ k1\_complfld\ X0\ X0 = k5\_struct\_0 \\ k1\_complfld))\end{gathered}$$