t10_complfld (TMXcBrvxQS-gxuU2XBiKUrLvudRxXrED4J7T)

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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 $k4\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_group\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_group\_1 : \iota \Rightarrow \iota$ be given. Let $k6\_complex1 : \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k5\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_binop\_2 : \iota \Rightarrow \iota$ be given. Let $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ 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 $v36\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v4\_vectsp\_1 : \iota \Rightarrow o$ 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 $k2\_numbers : \iota$ 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. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k5\_complex1 : \iota$ be given. Assume the following.

$$k1\_group\_1\ k1\_complfld = k6\_complex1 \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ k1\_complfld)) \Rightarrow (\forall X1.\ (m1\_subset\_1\ X1\ (u1\_struct\_0\ k1\_complfld)) \Rightarrow (\forall X2.(v1\_xcmplx\_0\ X2) \Rightarrow (\forall X3.(v1\_xcmplx\_0\ X3) \Rightarrow (((X0 = X2) \wedge (X1 = X3)) \Rightarrow (k8\_group\_1\ k1\_complfld\ X0\ X1 = k5\_binop\_2\ X2\ X3))))) \tag{2}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ k1\_complfld)) \Rightarrow (\forall X1.\ (v1\_xcmplx\_0\ X1) \Rightarrow ((X0 = X1) \Rightarrow (k4\_algstr\_0\ k1\_complfld\ X0 = k1\_binop\_2\ X1))) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k3\_xcmplx\_0\ X0\ (k4\_xcmplx\_0\ np\_\_1) = k4\_xcmplx\_0\ X0) \tag{4}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_1)\wedge(m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers))\wedge((m1\_subset\_1\ np\_\_1\ k5\_numbers)\wedge(m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow(k5\_binop\_2\ X0\ X1 = k3\_xcmplx\_0\ X0\ X1) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(k1\_binop\_2\ X0 = k4\_xcmplx\_0\ X0) \tag{7}$$

Assume the following.

$$(v36\_algstr\_0\ k1\_complfld)\wedge(v4\_vectsp\_1\ k1\_complfld) \tag{8}$$

Assume the following.

$$\forall X0.(l6\_algstr\_0\ X0)\Rightarrow((l2\_algstr\_0\ X0)\wedge(l5\_algstr\_0\ X0)) \tag{9}$$

Assume the following.

$$m1\_subset\_1\ k6\_complex1\ k2\_numbers \tag{10}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(v1\_xcmplx\_0\ (k4\_xcmplx\_0\ X0)) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.((l2\_algstr\_0\ X0)\wedge(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)))\Rightarrow(m1\_subset\_1\ (k4\_algstr\_0\ X0\ X1)\ (u1\_struct\_0\ X0)) \tag{12}$$

Assume the following.

$$(v36\_algstr\_0\ k1\_complfld)\wedge(l6\_algstr\_0\ k1\_complfld) \tag{13}$$

Assume the following.

$$k6\_complex1 = np\_\_1 \tag{14}$$

Assume the following.

$$\forall X0.((v36\_algstr\_0\ X0)\wedge(l6\_algstr\_0\ X0))\Rightarrow((X0 = k1\_complfld)\Leftrightarrow((u1\_struct\_0\ X0 = k2\_numbers)\wedge((u1\_algstr\_0\ X0 = k27\_binop\_2)\wedge((u2\_algstr\_0\ X0 = k29\_binop\_2)\wedge((k5\_struct\_0\ X0 = k6\_complex1)\wedge(k4\_struct\_0\ X0 = k5\_complex1)))))) \tag{15}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow(k3\_xcmplx\_0\ X0\ X1 = k3\_xcmplx\_0\ X1\ X0) \tag{16}$$

Assume the following.

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

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ k1\_complfld)) \Rightarrow (v1\_xcmplx\_0\ X0) \tag{18}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ (u1\_struct\_0\ k1\_complfld)) \Rightarrow (k4\_algstr\_0\ k1\_complfld\ X0 = k8\_group\_1\ k1\_complfld\ (k4\_algstr\_0\ k1\_complfld\ (k1\_group\_1\ k1\_complfld))\ X0)$$