t42_complex1 (TMZ2aXwrgiVtBer1mvxJKz8fbxASYYqPfCx)

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Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k3\_complex1 : \iota \Rightarrow \iota$ be given. Let $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k15\_complex1 : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k4\_complex1 : \iota \Rightarrow \iota$ be given. Let $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_real\_1 : \iota \Rightarrow \iota$ be given. Let $k9\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k7\_complex1 : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k1\_xcmplx\_0 : \iota$ be given. Let $k1\_complex1 : \iota \Rightarrow \iota$ be given. Let $k14\_complex1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow ((k3\_complex1\ (k2\_xcmplx\_0\ X0\ X1) = k7\_real\_1\ (k3\_complex1\ X0)\ (k3\_complex1 X1)) \wedge (k4\_complex1\ (k2\_xcmplx\_0\ X0\ X1) = k7\_real\_1\ (k4\_complex1 X0)\ (k4\_complex1\ X1)))) \tag{1}$$

Assume the following.

$$(k3\_complex1\ k6\_numbers = k6\_numbers) \wedge (k4\_complex1\ k6\_numbers = k6\_numbers) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow ((k3\_complex1\ (k2\_xcmplx\_0\ X0\ (k15\_complex1 X0)) = k8\_real\_1\ np\_\_2\ (k3\_complex1\ X0)) \wedge (k4\_complex1\ (k2\_xcmplx\_0 X0\ (k15\_complex1\ X0)) = k6\_numbers)) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k3\_xcmplx\_0\ X0\ k6\_numbers = k6\_numbers) \tag{4}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow((k3\_complex1\ (k15\_complex1\ X0) = k3\_complex1\ X0)\wedge(k4\_complex1\ (k15\_complex1\ X0) = k1\_real\_1\ (k4\_complex1\ X0)))) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(\forall X1.(v1\_xcmplx\_0\ X1)\Rightarrow(X0 = k6\_xcmplx\_0\ (k2\_xcmplx\_0\ X0\ X1)\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(k2\_xcmplx\_0\ X0\ k6\_numbers = X0) \tag{7}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(\forall X1.(v1\_xcmplx\_0\ X1)\Rightarrow((k3\_complex1\ (k6\_xcmplx\_0\ X0\ X1) = k9\_real\_1\ (k3\_complex1\ X0)\ (k3\_complex1\ X1))\wedge(k4\_complex1\ (k6\_xcmplx\_0\ X0\ X1) = k9\_real\_1\ (k4\_complex1\ X0)\ (k4\_complex1\ X1)))) \tag{8}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow((k3\_complex1\ (k4\_xcmplx\_0\ X0) = k1\_real\_1\ (k3\_complex1\ X0))\wedge(k4\_complex1\ (k4\_xcmplx\_0\ X0) = k1\_real\_1\ (k4\_complex1\ X0))) \tag{9}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(k6\_xcmplx\_0\ X0\ X0 = k6\_numbers) \tag{10}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow((k3\_complex1\ (k2\_xcmplx\_0\ X0\ (k3\_xcmplx\_0\ X1\ k7\_complex1)) = X0)\wedge(k4\_complex1\ (k2\_xcmplx\_0\ X0\ (k3\_xcmplx\_0\ X1\ k7\_complex1)) = X1))) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow(k2\_xcmplx\_0\ X0\ (k4\_xcmplx\_0\ X1) = k6\_xcmplx\_0\ X0\ X1) \tag{12}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k1\_numbers)\wedge(v1\_xreal\_0\ X1))\Rightarrow(k7\_real\_1\ X0\ X1 = k2\_xcmplx\_0\ X0\ X1) \tag{13}$$

Assume the following.

$$k7\_complex1 = k1\_xcmplx\_0 \tag{14}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k3\_complex1\ X0 = k1\_complex1\ X0) \tag{15}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k15\_complex1\ X0 = k14\_complex1\ X0) \tag{16}$$

Assume the following.

$$k4\_xcmplx\_0\ k6\_numbers = k6\_numbers \tag{17}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k4\_xcmplx\_0\ (k4\_xcmplx\_0\ X0) = X0) \tag{18}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (v1\_xcmplx\_0\ (k2\_xcmplx\_0\ X0\ X1)) \tag{19}$$

Assume the following.

$$v1\_xcmplx\_0\ k1\_xcmplx\_0 \tag{20}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (v1\_xreal\_0\ (k1\_complex1\ X0)) \tag{21}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (v1\_xcmplx\_0\ (k4\_xcmplx\_0\ X0)) \tag{22}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (m1\_subset\_1\ (k4\_complex1\ X0)\ k1\_numbers) \tag{23}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (v1\_xcmplx\_0\ (k14\_complex1\ X0)) \tag{24}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k14\_complex1\ X0 = k6\_xcmplx\_0\ (k3\_complex1\ X0)\ (k3\_xcmplx\_0\ (k4\_complex1\ X0)\ k7\_complex1)) \tag{25}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (k3\_xcmplx\_0\ X0\ X1 = k3\_xcmplx\_0\ X1\ X0) \tag{26}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow(k2\_xcmplx\_0\ X0\ X1 = k2\_xcmplx\_0\ X1\ X0) \tag{27}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xreal\_0\ X0) \tag{28}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xcmplx\_0\ X0) \tag{29}$$

Theorem 1

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow((k3\_complex1\ (k6\_xcmplx\_0\ X0\ (k15\_complex1\ X0)) = k6\_numbers)\wedge(k4\_complex1\ (k6\_xcmplx\_0\ X0\ (k15\_complex1\ X0)) = k8\_real\_1\ np\_\_2\ (k4\_complex1\ X0)))$$