

t37_complex1

(TMYv6B4P489kiZ3VSNhzuSBHTBQ7QMDLxSm)

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Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k15_complex1 : \iota \Rightarrow \iota$ be given. Let $k13_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k12_complex1 : \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_complex1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Let $k14_complex1 : \iota \Rightarrow \iota$ be given. Let $k7_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k15_complex1 (k5_xcmplx_0 X0) = k12_complex1 (k15_complex1 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (k15_complex1 (k3_xcmplx_0 X0 X1) = k9_complex1 (k15_complex1 X0) (k15_complex1 X1))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k2_numbers) \wedge (m1_subset_1 X1 k2_numbers)) \Rightarrow (k9_complex1 X0 X1 = k3_xcmplx_0 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k15_complex1 X0 = k14_complex1 X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k13_complex1 X0 X1 = k7_xcmplx_0 X0 X1) \quad (5)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k2_numbers) \Rightarrow (k12_complex1 X0 = k5_xcmplx_0 X0) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (v1_xcmplx_0 (k5_xcmplx_0 X0)) \quad (7)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (m1_subset_1 (k15_complex1 X0) k2_numbers) \quad (8)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (v1_xcmplx_0 (k14_complex1 X0)) \quad (9)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (k7_xcmplx_0 X0 X1 = k3_xcmplx_0 X0 (k5_xcmplx_0 X1))) \quad (10)$$

Theorem 1

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (k15_complex1 (k13_complex1 X0 X1) = k13_complex1 (k15_complex1 X0) (k15_complex1 X1)))$$