

t12_complex1
(TMQfJRNChM4p7Vv2LJJikTDgp1AShFx3atZ)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k3_complex1 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_complex1 : \iota$ be given. Let $k4_complex1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_arytm_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1. (m1_subset_1 X1 k1_numbers) \Rightarrow ((k3_complex1 (k5_arytm_0 X0 X1) = X0) \wedge (k4_complex1 (k5_arytm_0 X0 X1) = X1))) \quad (2)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1. (m1_subset_1 X1 k1_numbers) \Rightarrow (k5_arytm_0 X0 X1 = k2_xcmplx_0 X0 (k3_xcmplx_0 X1 k7_complex1))) \quad (3)$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Leftrightarrow (X0 \in k1_numbers) \quad (4)$$

Theorem 1

$$\forall X0. (v1_xreal_0 X0) \Rightarrow (\forall X1. (v1_xreal_0 X1) \Rightarrow ((k3_complex1 (k2_xcmplx_0 X0 (k3_xcmplx_0 X1 k7_complex1)) = X0) \wedge (k4_complex1 (k2_xcmplx_0 X0 (k3_xcmplx_0 X1 k7_complex1)) = X1)))$$