

l16_complex1 (TM- MEwXre1aLYkF1cQvZ5LzRbB3rmr8Ug3kB)

October 27, 2020

Let $k7_complex1 : \iota$ be given. Let $k5_arytm_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $np_1 : \iota$ be given. Let $v2_xreal_0 : \iota \Rightarrow o$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_0 : \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k1_xcmplx_0 : \iota$ be given. Let $c5_xreal_0 : \iota$ be given. Let $k1_arytm_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $c3_xreal_0 : \iota$ be given. Let $k5_funct_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & ((v2_xreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & (m2_subset_1 \ np_0 \ k1_numbers \ k5_numbers) \wedge ((m1_subset_1 \ np_0 \\ & \quad k5_numbers) \wedge (m1_subset_1 \ np_0 \ k1_numbers)) \end{aligned} \quad (2)$$

Assume the following.

$$k2_xcmplx_0 \ np_1 \ (k4_xcmplx_0 \ np_1) = np_0 \quad (3)$$

Assume the following.

$$k7_complex1 = k1_xcmplx_0 \quad (4)$$

Assume the following.

$$\begin{aligned} & (c5_xreal_0 = k4_xcmplx_0 \ np_1) \wedge (k1_arytm_0 \ c3_xreal_0 \ c5_xreal_0 = \\ & \quad k6_numbers) \end{aligned} \quad (5)$$

Assume the following.

$$k2_xcmplx_0 \ np_1 \ (k4_xcmplx_0 \ np_1) = k6_numbers \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 k1_numbers) \Rightarrow (((X1 = k6_numbers) \Rightarrow (k5_arytm_0 X0 X1 = X0)) \wedge ((\\ & X1 \neq k6_numbers) \Rightarrow (k5_arytm_0 X0 X1 = k5_funct_4 k1_numbers k6_numbers \\ & \quad np_1 X0 X1)))) \end{aligned} \tag{7}$$

Assume the following.

$$k1_xcmplx_0 = k5_funct_4 k1_numbers k6_numbers np_1 k6_numbers np_1 \tag{8}$$

Theorem 1 $k7_complex1 = k5_arytm_0 k6_numbers np_1$.