

t39_complex1

(TMG9bcxC8rYqdM68cNHgdmabiHu6CaLL5df)

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Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k3_complex1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k15_complex1 : \iota \Rightarrow \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k4_complex1 : \iota \Rightarrow \iota$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k14_complex1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$(k3_complex1\ k6_numbers = k6_numbers) \wedge (k4_complex1\ k6_numbers = k6_numbers) \tag{1}$$

Assume the following.

$$\forall X0.(v1_xcmplx_0\ X0) \Rightarrow (\forall X1.(v1_xcmplx_0\ X1) \Rightarrow ((k3_complex1\ X0 = k3_complex1\ X1) \wedge (k4_complex1\ X0 = k4_complex1\ X1)) \Rightarrow (X0 = X1)) \tag{2}$$

Assume the following.

$$\forall X0.(v1_xcmplx_0\ X0) \Rightarrow ((k3_complex1\ (k15_complex1\ X0) = k3_complex1\ X0) \wedge (k4_complex1\ (k15_complex1\ X0) = k1_real_1\ (k4_complex1\ X0))) \tag{3}$$

Assume the following.

$$\forall X0.(v1_xcmplx_0\ X0) \Rightarrow (\forall X1.(v1_xcmplx_0\ X1) \Rightarrow ((k3_complex1\ (k6_xcmplx_0\ X0\ X1) = k9_real_1\ (k3_complex1\ X0)\ (k3_complex1\ X1)) \wedge (k4_complex1\ (k6_xcmplx_0\ X0\ X1) = k9_real_1\ (k4_complex1\ X0)\ (k4_complex1\ X1)))) \tag{4}$$

Assume the following.

$$\forall X0.(v1_xcmplx_0\ X0) \Rightarrow ((k3_complex1\ (k4_xcmplx_0\ X0) = k1_real_1\ (k3_complex1\ X0)) \wedge (k4_complex1\ (k4_xcmplx_0\ X0) = k1_real_1\ (k4_complex1\ X0))) \tag{5}$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k6_xcmplx_0 X0 X0 = k6_numbers) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k6_xcmplx_0 k6_numbers X0 = k4_xcmplx_0 X0) \quad (7)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (8)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k15_complex1 X0 = k14_complex1 X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (v1_xcmplx_0 (k6_xcmplx_0 X0 X1)) \quad (10)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (v1_xcmplx_0 (k4_xcmplx_0 X0)) \quad (11)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (v1_xcmplx_0 (k14_complex1 X0)) \quad (12)$$

Theorem 1

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow ((k3_complex1 X0 = k6_numbers) \Rightarrow (k15_complex1 X0 = k4_xcmplx_0 X0))$$