

t10_polyeq_1
(TMMW2adUTvuSufkor9PQrzw6gbUvjS8rbbc)

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Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k3_polyeq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_0 : \iota$ 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 $k3_square_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k6_xcmplx_0 X0 k6_numbers = X0) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k3_xcmplx_0 X0 k6_numbers = k6_numbers) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k6_xcmplx_0 (k4_xcmplx_0 X0) (k4_xcmplx_0 X1) = k6_xcmplx_0 X1 X0) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k2_xcmplx_0 X0 (k4_xcmplx_0 X1) = k6_xcmplx_0 X0 X1) \quad (5)$$

Assume the following.

$$(m2_subset_1 np_0 k1_numbers k5_numbers) \wedge ((m1_subset_1 np_0 k5_numbers) \wedge (m1_subset_1 np_0 k1_numbers)) \quad (6)$$

Assume the following.

$$v1_xboole_0 np_0 \quad (7)$$

Assume the following.

$$k4_xcmplx_0 \ np_0 = np_0 \quad (8)$$

Assume the following.

$$k2_xcmplx_0 \ np_0 \ np_0 = np_0 \quad (9)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (10)$$

Assume the following.

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

Assume the following.

$$\forall X0.(v1_xcmplx_0 \ X0) \Rightarrow (v1_xcmplx_0 \ (k3_square_1 \ X0)) \quad (12)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 \ X0) \Rightarrow (v1_xcmplx_0 \ (k4_xcmplx_0 \ X0)) \quad (13)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xcmplx_0 \ X0) \Rightarrow (\forall X1.(v1_xcmplx_0 \ X1) \Rightarrow (\forall X2. \\ (v1_xcmplx_0 \ X2) \Rightarrow (\forall X3.(v1_xcmplx_0 \ X3) \Rightarrow (k3_polyeq_1 \\ X0 \ X1 \ X2 \ X3 = k2_xcmplx_0 \ (k2_xcmplx_0 \ (k3_xcmplx_0 \ X0 \ (k3_square_1 \\ X3)) \ (k3_xcmplx_0 \ X1 \ X3)) \ X2)))) \end{aligned} \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 \ X0) \wedge (v1_xcmplx_0 \ X1)) \Rightarrow (k3_xcmplx_0 \ X0 \ X1 = k3_xcmplx_0 \ X1 \ X0) \quad (15)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (v1_xcmplx_0 \ X0) \quad (16)$$

Theorem 1

$$\forall X0.(v1_xcmplx_0 \ X0) \Rightarrow ((X0 \neq k6_numbers) \Rightarrow (\forall X1.(v1_xcmplx_0 \ X1) \Rightarrow (k3_polyeq_1 \ k6_numbers \ k6_numbers \ X0 \ X1 \neq k6_numbers)))$$