

t18_xcplx_1 (TM-
cMhgZMTG5zeUAgLsBxtrV6Ud7ASp2Bp8K)

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Let $v1_xcplx_0 : \iota \Rightarrow o$ be given. Let $k6_xcplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k4_xcplx_0 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (k2_xcplx_0 X0 k6_numbers = X0) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (k6_xcplx_0 X0 X0 = k6_numbers) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (k2_xcplx_0 (k4_xcplx_0 X0) (k4_xcplx_0 X1) = k4_xcplx_0 (k2_xcplx_0 X0 X1)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1_xcplx_0 X0) \wedge ((v1_xcplx_0 X1) \wedge (v1_xcplx_0 X2))) \Rightarrow (k2_xcplx_0 (k2_xcplx_0 X0 X1) X2 = k2_xcplx_0 X0 (k2_xcplx_0 X1 X2)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (k2_xcplx_0 X0 (k4_xcplx_0 X1) = k6_xcplx_0 X0 X1) \quad (5)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (6)$$

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (k4_xcplx_0 (k4_xcplx_0 X0) = X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0)\wedge(v1_xcmplx_0 X1))\Rightarrow(v1_xcmplx_0 (k6_xcmplx_0 X0 X1)) \quad (8)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0)\Rightarrow(v1_xcmplx_0 (k4_xcmplx_0 X0)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0)\wedge(v1_xcmplx_0 X1))\Rightarrow(k2_xcmplx_0 X0 X1 = k2_xcmplx_0 X1 X0) \quad (10)$$

Theorem 1

$$\forall X0.(v1_xcmplx_0 X0)\Rightarrow(\forall X1.(v1_xcmplx_0 X1)\Rightarrow(k6_xcmplx_0 X0 (k6_xcmplx_0 X0 X1) = X1))$$