

t166_xcplx_1 (TM-
cUhd4cr1xLZQo7CVR44ADQHPZx9swSVNt)

October 27, 2020

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

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow (k4_xcplx_0 (k2_xcplx_0 X0 X1) = k6_xcplx_0 (k4_xcplx_0 X1) X0)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (v1_xcplx_0 (k2_xcplx_0 X0 X1)) \quad (2)$$

Assume the following.

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

Theorem 1

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow (\forall X2.(v1_xcplx_0 X2) \Rightarrow (k4_xcplx_0 (k2_xcplx_0 (k2_xcplx_0 X0 X1) X2) = k6_xcplx_0 (k6_xcplx_0 (k4_xcplx_0 X0) X1) X2)))$$