

t184_xcplx_1
(TMN3U9jp8aEzb5MchLbM3fXZYzfG8J9GLD9)

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Let $v1_xcplx_0 : \iota \Rightarrow o$ be given. Let $k3_xcplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_xcplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xcplx_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow (k3_xcplx_0 (k4_xcplx_0 X0) X1 = k3_xcplx_0 X0 (k4_xcplx_0 X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow (k4_xcplx_0 (k6_xcplx_0 X0 X1) = k6_xcplx_0 X1 X0)) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (v1_xcplx_0 (k6_xcplx_0 X0 X1)) \quad (3)$$

Theorem 1

$$\forall X0.(v1_xcplx_0 X0) \Rightarrow (\forall X1.(v1_xcplx_0 X1) \Rightarrow (\forall X2.(v1_xcplx_0 X2) \Rightarrow (k3_xcplx_0 (k6_xcplx_0 X0 X1) X2 = k3_xcplx_0 (k6_xcplx_0 X1 X0) (k4_xcplx_0 X2))))$$