

t142_xcplx_1
(TMLS8x9nLNknYCBU33fs3cSE8WENhncXg28)

October 27, 2020

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

$$\forall X0. \forall X1. ((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (k6_xcplx_0 (k4_xcplx_0 X0) (k4_xcplx_0 X1) = k6_xcplx_0 X1 X0) \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (k2_xcplx_0 (k4_xcplx_0 X0) (k4_xcplx_0 X1) = k4_xcplx_0 (k2_xcplx_0 X0 X1)) \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (k2_xcplx_0 X0 (k4_xcplx_0 X1) = k6_xcplx_0 X0 X1) \tag{3}$$

Assume the following.

$$\forall X0. (v1_xcplx_0 X0) \Rightarrow (v1_xcplx_0 (k4_xcplx_0 X0)) \tag{4}$$

Theorem 1

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