

t29_xcplx_1 (TMVhcboUXncS- dGjKZ1AqhQMF7bFSSrRzTh)

October 27, 2020

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 $k4_xcplx_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v1_xcplx_0 X0) \wedge ((v1_xcplx_0 X1) \wedge (v1_xcplx_0 X2))) \Rightarrow (k2_xcplx_0 (k2_xcplx_0 X0 X1) X2 = k2_xcplx_0 X0 (k2_xcplx_0 X1 X2)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xcplx_0 X0) \wedge (v1_xcplx_0 X1)) \Rightarrow (k2_xcplx_0 X0 (k4_xcplx_0 X1) = k6_xcplx_0 X0 X1) \quad (2)$$

Assume the following.

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

Assume the following.

$$\forall X0. (v1_xcplx_0 X0) \Rightarrow (v1_xcplx_0 (k4_xcplx_0 X0)) \quad (4)$$

Assume the following.

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

Theorem 1

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