

t167\_xcplx\_1  
(TMXG18MFJ6m4nVopTM2cBfjKVSypUdfXRRB)

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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.

$$\forall X0.(v1\_xcplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcplx\_0 X1) \Rightarrow (k4\_xcplx\_0 (k6\_xcplx\_0 X0 X1) = k2\_xcplx\_0 (k4\_xcplx\_0 X0) X1)) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xcplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcplx\_0 X1) \Rightarrow (k4\_xcplx\_0 (k2\_xcplx\_0 X0 X1) = k6\_xcplx\_0 (k4\_xcplx\_0 X1) X0)) \quad (2)$$

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.

$$\forall X0.\forall X1.((v1\_xcplx\_0 X0) \wedge (v1\_xcplx\_0 X1)) \Rightarrow (k2\_xcplx\_0 X0 X1 = k2\_xcplx\_0 X1 X0) \quad (4)$$

**Theorem 1**

$$\forall X0.(v1\_xcplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcplx\_0 X1) \Rightarrow (\forall X2.(v1\_xcplx\_0 X2) \Rightarrow (k4\_xcplx\_0 (k6\_xcplx\_0 (k2\_xcplx\_0 X0 X1) X2) = k2\_xcplx\_0 (k6\_xcplx\_0 (k4\_xcplx\_0 X0) X1) X2)))$$