

t78\_xcplx\_1  
(TMRZsfb2THi3Dq6xZ6SEuhhz6LAPb2qiEPg)

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Let  $v1\_xcplx\_0 : \iota \Rightarrow o$  be given. Let  $k7\_xcplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xcplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_xcplx\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xcplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcplx\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xcplx\_0 X2) \Rightarrow (k7\_xcplx\_0 (k7\_xcplx\_0 X0 X1) X2 = k7\_xcplx\_0 \\ & (k7\_xcplx\_0 X0 X2) X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcplx\_0 X0) \wedge (v1\_xcplx\_0 X1)) \Rightarrow (k3\_xcplx\_0 X0 (k5\_xcplx\_0 X1) = k7\_xcplx\_0 X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xcplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcplx\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xcplx\_0 X2) \Rightarrow (k7\_xcplx\_0 X0 (k7\_xcplx\_0 X1 X2) = k7\_xcplx\_0 \\ & (k3\_xcplx\_0 X0 X2) X1))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(v1\_xcplx\_0 X0) \Rightarrow (k5\_xcplx\_0 (k5\_xcplx\_0 X0) = X0) \quad (4)$$

Assume the following.

$$\forall X0.(v1\_xcplx\_0 X0) \Rightarrow (v1\_xcplx\_0 (k5\_xcplx\_0 X0)) \quad (5)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_xcplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcplx\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xcplx\_0 X2) \Rightarrow (k7\_xcplx\_0 X0 (k3\_xcplx\_0 X1 X2) = k7\_xcplx\_0 \\ & (k7\_xcplx\_0 X0 X1) X2))) \end{aligned}$$