

t128\_xcplx\_1  
(TMZnsSiTe9X1RXzbd8WfaBvS4X1PidLXrXe)

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Let  $v1\_xcplx\_0 : \iota \Rightarrow o$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k6\_xcplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xcplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_xcplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xcplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcplx\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xcplx\_0 X2) \Rightarrow (k3\_xcplx\_0 X0 (k6\_xcplx\_0 X1 X2) = k6\_xcplx\_0 \\ & (k3\_xcplx\_0 X0 X1) (k3\_xcplx\_0 X0 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xcplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcplx\_0 X1) \Rightarrow (( \\ & X0 \neq k6\_numbers) \Rightarrow (k3\_xcplx\_0 (k7\_xcplx\_0 X1 X0) X0 = X1))) \end{aligned} \quad (2)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1\_xcplx\_0 X0) \wedge (v1\_xcplx\_0 X1)) \Rightarrow ( \\ & k3\_xcplx\_0 X0 X1 = k3\_xcplx\_0 X1 X0) \end{aligned} \quad (4)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_xcplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcplx\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xcplx\_0 X2) \Rightarrow ((X0 \neq k6\_numbers) \Rightarrow (k6\_xcplx\_0 X1 X2 = k3\_xcplx\_0 \\ & X0 (k6\_xcplx\_0 (k7\_xcplx\_0 X1 X0) (k7\_xcplx\_0 X2 X0)))))) \end{aligned}$$