

l58\_xcmplx\_1 (TMHKQQZxUqjb-whVYFZi3H6V8BJ82EfbUben)

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

$$\begin{aligned} \forall X0. \forall X1. ((v1\_xcmplx\_0 X0) \wedge (v1\_xcmplx\_0 X1)) \Rightarrow ( \\ k7\_xcmplx\_0 (k5\_xcmplx\_0 X0) (k5\_xcmplx\_0 X1) = k7\_xcmplx\_0 X1 \\ X0) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((v1\_xcmplx\_0 X0) \wedge (v1\_xcmplx\_0 X1)) \Rightarrow ( \\ k3\_xcmplx\_0 (k5\_xcmplx\_0 X0) (k5\_xcmplx\_0 X1) = k5\_xcmplx\_0 (k3\_xcmplx\_0 X0 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (v1\_xcmplx\_0 X0) \Rightarrow (v1\_xcmplx\_0 (k5\_xcmplx\_0 X0)) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. (v1\_xcmplx\_0 X0) \Rightarrow (\forall X1. (v1\_xcmplx\_0 X1) \Rightarrow (k7\_xcmplx\_0 \\ X0 X1 = k3\_xcmplx\_0 X0 (k5\_xcmplx\_0 X1))) \end{aligned} \quad (4)$$

### Theorem 1

$$\begin{aligned} \forall X0. (v1\_xcmplx\_0 X0) \Rightarrow (\forall X1. (v1\_xcmplx\_0 X1) \Rightarrow (k5\_xcmplx\_0 \\ (k7\_xcmplx\_0 X0 X1) = k7\_xcmplx\_0 X1 X0))) \end{aligned}$$