t206_xcmplx_1 (TM-MYsmwRSeH8WdNczNYtdUavanG2yTP4m5W)

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

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (k5\_xcmplx\_0\ (k3\_xcmplx\_0\ X0\ (k5\_xcmplx\_0\ X1)) = k3\_xcmplx\_0\ (k5\_xcmplx\_0\ X0)\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k5\_xcmplx\_0\ (k5\_xcmplx\_0\ X0) = X0) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (v1\_xcmplx\_0\ (k5\_xcmplx\_0\ X0)) \tag{3}$$

Theorem 1

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (k5\_xcmplx\_0\ (k3\_xcmplx\_0\ (k5\_xcmplx\_0\ X0)\ (k5\_xcmplx\_0\ X1)) = k3\_xcmplx\_0\ X0\ X1))$$