t164_xcmplx_1 (TMcF8VLWUnGtkKzv1XQYHjdR2BbzuYQMJus)

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Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (\forall X2.\ (v1\_xcmplx\_0\ X2) \Rightarrow (k6\_xcmplx\_0\ (k6\_xcmplx\_0\ X0\ X1)\ X2 = k6\_xcmplx\_0\ (k6\_xcmplx\_0\ X0\ X2)\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (\forall X2.\ (v1\_xcmplx\_0\ X2) \Rightarrow (k6\_xcmplx\_0\ (k6\_xcmplx\_0\ X0\ X1)\ X2 = k6\_xcmplx\_0\ (k2\_xcmplx\_0\ (k4\_xcmplx\_0\ X2)\ X0)\ X1))) \tag{2}$$

Theorem 1

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