t16_polyeq_3 (TMGLShgHp-WASxk3eJxtgUCs7DR4ZNedEYSc)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_numbers : \iota$ be given. Let $k1\_polyeq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k1\_binop\_2 : \iota \Rightarrow \iota$ be given. Let $k6\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Let $k7\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (\forall X2.\ (v1\_xcmplx\_0\ X2) \Rightarrow ((k1\_polyeq\_1\ X0\ X1\ X2 = k6\_numbers) \Rightarrow ((X0 = k6\_numbers) \vee (X2 = k4\_xcmplx\_0\ (k7\_xcmplx\_0\ X1\ X0))))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (k6\_binop\_2\ X0\ X1 = k7\_xcmplx\_0\ X0\ X1) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k1\_binop\_2\ X0 = k4\_xcmplx\_0\ X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (m1\_subset\_1\ (k6\_binop\_2\ X0\ X1)\ k2\_numbers) \tag{4}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k2\_numbers) \Rightarrow (v1\_xcmplx\_0\ X0) \tag{5}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ k2\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k2\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k2\_numbers) \Rightarrow ((k1\_polyeq\_1\ X0\ X1\ X2 = k6\_numbers) \Rightarrow ((X0 = k6\_numbers) \vee (X2 = k1\_binop\_2\ (k6\_binop\_2\ X1\ X0))))))$$