t17_complex2 (TMP-szmwMqSECdgWN3pQPv3Hx2TqZEqegDq1)

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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 $k6\_numbers : \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k32\_sin\_cos : \iota$ be given. Let $k1\_comptrig : \iota \Rightarrow \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (\forall X2.\ (v1\_xcmplx\_0\ X2) \Rightarrow (\forall X3.(v1\_xcmplx\_0\ X3) \Rightarrow ((k2\_xcmplx\_0\ X0\ X1 = k2\_xcmplx\_0\ X2\ X3) \Rightarrow (k6\_xcmplx\_0\ X0\ X2 = k6\_xcmplx\_0\ X3\ X1))))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow ((X0 \neq k6\_numbers) \Rightarrow ((\neg r1\_xxreal\_0\ k32\_sin\_cos\ (k1\_comptrig\ X0)) \Leftrightarrow (r1\_xxreal\_0\ k32\_sin\_cos\ (k1\_comptrig\ (k4\_xcmplx\_0\ X0))))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow ((k6\_xcmplx\_0\ X0\ X1 = k6\_numbers) \Rightarrow (X0 = X1))) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k6\_xcmplx\_0\ X0\ X0 = k6\_numbers) \tag{4}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (k4\_xcmplx\_0\ (k6\_xcmplx\_0\ X0\ X1) = k6\_xcmplx\_0\ X1\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (v1\_xcmplx\_0\ (k6\_xcmplx\_0\ X0\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(m1\_subset\_1\ (k1\_comptrig\ X0)\ k1\_numbers) \tag{7}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xcmplx\_0\ X0) \tag{8}$$

Theorem 1

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(\forall X1.(v1\_xcmplx\_0\ X1)\Rightarrow((\neg(X0 = X1)\wedge(k6\_xcmplx\_0\ X0\ X1 = k6\_numbers))\Rightarrow((\neg r1\_xxreal\_0\ k32\_sin\_cos\ (k1\_comptrig\ (k6\_xcmplx\_0\ X0\ X1)))\Leftrightarrow(r1\_xxreal\_0\ k32\_sin\_cos\ (k1\_comptrig\ (k6\_xcmplx\_0\ X1\ X0))))))$$