t80_sin_cos6 (TMdp3CP2YhLtvXeiiQuN4hyPmG6haBw37Nv)

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Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_square\_1 : \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k21\_sin\_cos : \iota \Rightarrow \iota$ be given. Let $k3\_sin\_cos6 : \iota \Rightarrow \iota$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (((r1\_xxreal\_0\ k6\_numbers\ X0) \wedge (k2\_xcmplx\_0\ (k3\_square\_1\ X1)\ (k3\_square\_1\ X0) = np\_\_1)) \Rightarrow (k21\_sin\_cos\ (k3\_sin\_cos6\ X1) = X0))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow ((\neg(\neg r1\_xxreal\_0\ k6\_numbers\ X0) \wedge (r1\_xxreal\_0\ (k4\_xcmplx\_0\ X0)\ k6\_numbers)) \wedge (\neg(\neg r1\_xxreal\_0\ (k4\_xcmplx\_0\ X0)\ k6\_numbers) \wedge (r1\_xxreal\_0\ k6\_numbers\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k3\_square\_1\ X0 = k3\_square\_1\ (k4\_xcmplx\_0\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k4\_xcmplx\_0\ (k4\_xcmplx\_0\ X0) = X0) \tag{4}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow ((v1\_xcmplx\_0\ (k4\_xcmplx\_0\ X0)) \wedge (v1\_xreal\_0\ (k4\_xcmplx\_0\ X0))) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (v1\_xcmplx\_0\ X0) \tag{6}$$

Theorem 1

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (((r1\_xxreal\_0\ X0\ k6\_numbers) \wedge (k2\_xcmplx\_0\ (k3\_square\_1\ X1)\ (k3\_square\_1\ X0) = np\_\_1)) \Rightarrow (k21\_sin\_cos\ (k3\_sin\_cos6\ X1) = k4\_xcmplx\_0\ X0)))$$