t42_sin_cos4 (TMJ9nj4MyC35By2HN1RQSCQr9dC6YuQy2x8)

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Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k20\_sin\_cos : \iota \Rightarrow \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17\_sin\_cos : \iota \Rightarrow \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (k20\_sin\_cos\ (k6\_xcmplx\_0\ X0\ X1) = k2\_xcmplx\_0\ (k3\_xcmplx\_0\ (k20\_sin\_cos\ X0)\ (k20\_sin\_cos\ X1))\ (k3\_xcmplx\_0\ (k17\_sin\_cos\ X0)\ (k17\_sin\_cos\ X1)))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (k3\_xcmplx\_0\ (k20\_sin\_cos\ (k2\_xcmplx\_0\ X0\ X1))\ (k20\_sin\_cos\ (k6\_xcmplx\_0\ X0\ X1)) = k6\_xcmplx\_0\ (k3\_xcmplx\_0\ (k20\_sin\_cos\ X0)\ (k20\_sin\_cos\ X0))\ (k3\_xcmplx\_0\ (k17\_sin\_cos\ X1)\ (k17\_sin\_cos\ X1)))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (v1\_xreal\_0\ (k20\_sin\_cos\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (v1\_xreal\_0\ (k17\_sin\_cos\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (k3\_xcmplx\_0\ X0\ X1 = k3\_xcmplx\_0\ X1\ X0) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (k2\_xcmplx\_0\ X0\ X1 = k2\_xcmplx\_0\ X1\ X0) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (v1\_xcmplx\_0\ X0) \tag{7}$$

Theorem 1

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(k3\_xcmplx\_0\ (k20\_sin\_cos\ (k2\_xcmplx\_0\ X0\ X1))\ (k20\_sin\_cos\ (k6\_xcmplx\_0\ X0\ X1))) = k6\_xcmplx\_0\ (k3\_xcmplx\_0\ (k20\_sin\_cos\ X1)\ (k20\_sin\_cos\ X1))\ (k3\_xcmplx\_0\ (k17\_sin\_cos\ X0)\ (k17\_sin\_cos\ X0))))$$