# l3_sin_cos8 (TMQQJk-mDyJgQcBoU6D8kVVUgeyGRAMRdGpP)

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Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_square\_1 : \iota \Rightarrow \iota$ be given. Let $k6\_sin\_cos2 : \iota \Rightarrow \iota$ be given. Let $k3\_sin\_cos2 : \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_sin\_cos2 : \iota$ be given. Let $k1\_sin\_cos2 : \iota$ be given. Let $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_sin\_cos2 : \iota \Rightarrow \iota$ be given. Let $k3\_square\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_sin\_cos2 : \iota \Rightarrow \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow ((k9\_real\_1\ (k5\_square\_1\ (k1\_seq\_1\ k4\_sin\_cos2\ X0))\ (k5\_square\_1\ (k1\_seq\_1\ k1\_sin\_cos2\ X0)) = np\_\_1) \wedge (k9\_real\_1\ (k8\_real\_1\ (k1\_seq\_1\ k4\_sin\_cos2\ X0)\ (k1\_seq\_1\ k4\_sin\_cos2\ X0))\ (k8\_real\_1\ (k1\_seq\_1\ k1\_sin\_cos2\ X0)\ (k1\_seq\_1\ k1\_sin\_cos2\ X0)) = np\_\_1)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k1\_numbers) \wedge (v1\_xreal\_0\ X1)) \Rightarrow (k9\_real\_1\ X0\ X1 = k6\_xcmplx\_0\ X0\ X1) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k1\_numbers) \wedge (v1\_xreal\_0\ X1)) \Rightarrow (k8\_real\_1\ X0\ X1 = k3\_xcmplx\_0\ X0\ X1) \tag{3}$$

Assume the following.

$$\forall X0.k6\_sin\_cos2\ X0 = k5\_sin\_cos2\ X0 \tag{4}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (k5\_square\_1\ X0 = k3\_square\_1\ X0) \tag{5}$$

Assume the following.

$$\forall X0.k3\_sin\_cos2\ X0 = k2\_sin\_cos2\ X0 \tag{6}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xreal\_0\ (k3\_square\_1\ X0)) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k1\_numbers)\wedge(v1\_xreal\_0\ X1))\Rightarrow(m1\_subset\_1\ (k8\_real\_1\ X0\ X1)\ k1\_numbers) \tag{8}$$

Assume the following.

$$\forall X0.m1\_subset\_1\ (k6\_sin\_cos2\ X0)\ k1\_numbers \tag{9}$$

Assume the following.

$$\forall X0.m1\_subset\_1\ (k3\_sin\_cos2\ X0)\ k1\_numbers \tag{10}$$

Assume the following.

$$\forall X0.k5\_sin\_cos2\ X0 = k1\_seq\_1\ k4\_sin\_cos2\ X0 \tag{11}$$

Assume the following.

$$\forall X0.k2\_sin\_cos2\ X0 = k1\_seq\_1\ k1\_sin\_cos2\ X0 \tag{12}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(k3\_square\_1\ X0 = k3\_xcmplx\_0\ X0\ X0) \tag{13}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xcmplx\_0\ X0) \tag{14}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xreal\_0\ X0) \tag{15}$$

**Theorem 1**

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow((k6\_xcmplx\_0\ (k5\_square\_1\ (k6\_sin\_cos2\ X0))\ (k5\_square\_1\ (k3\_sin\_cos2\ X0)) = np\_\_1)\wedge(k6\_xcmplx\_0\ (k3\_xcmplx\_0\ (k6\_sin\_cos2\ X0)\ (k6\_sin\_cos2\ X0))\ (k3\_xcmplx\_0\ (k3\_sin\_cos2\ X0)\ (k3\_sin\_cos2\ X0)) = np\_\_1))$$