

t12\_sin\_cos2  
 (TMakq34zo1aQUGwGW5opvSb9Dy3DU3CgHRu)

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Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k24\_sin\_cos : \iota$  be given. Let  $k9\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k8\_real\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. ((v1\_xreal\_0 X0) \wedge (v1\_xreal\_0 X1)) \Rightarrow (k9\_binop\_2 X0 X1 = k2\_xcmplx\_0 X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1\_xreal\_0 X0) \Rightarrow (\forall X1. (v1\_xreal\_0 X1) \Rightarrow (k1\_seq\_1 k24\_sin\_cos (k2\_xcmplx\_0 X0 X1) = k8\_real\_1 (k1\_seq\_1 k24\_sin\_cos X0) (k1\_seq\_1 k24\_sin\_cos X1))) \quad (2)$$

**Theorem 1**

$$\forall X0. (v1\_xreal\_0 X0) \Rightarrow (\forall X1. (v1\_xreal\_0 X1) \Rightarrow (k1\_seq\_1 k24\_sin\_cos (k9\_binop\_2 X0 X1) = k8\_real\_1 (k1\_seq\_1 k24\_sin\_cos X0) (k1\_seq\_1 k24\_sin\_cos X1)))$$