

t2_sin_cos8
(TMNYr8fCPumvt1ujwcnudp6Hosr4RjFwijiS)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k3_sin_cos2 : \iota \Rightarrow \iota$ be given. Let $k7_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k3_sin_cos5 : \iota \Rightarrow \iota$ be given. Let $k6_sin_cos2 : \iota \Rightarrow \iota$ be given. Let $k2_sin_cos5 : \iota \Rightarrow \iota$ be given. Let $k9_sin_cos2 : \iota \Rightarrow \iota$ be given. Let $k1_sin_cos5 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (k7_xcmplx_0 np_1 (k7_xcmplx_0 X0 X1) = k7_xcmplx_0 X1 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k7_xcmplx_0 np_1 (k7_xcmplx_0 np_1 X0) = X0) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((k9_sin_cos2 X0 = k7_xcmplx_0 (k3_sin_cos2 X0) (k6_sin_cos2 X0)) \wedge (k9_sin_cos2 k6_numbers = k6_numbers)) \quad (3)$$

Assume the following.

$$((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers) \wedge (v1_xreal_0 X1)) \Rightarrow (k10_real_1 X0 X1 = k7_xcmplx_0 X0 X1) \quad (5)$$

Assume the following.

$$\forall X0.m1_subset_1 (k6_sin_cos2 X0) k1_numbers \quad (6)$$

Assume the following.

$$\forall X0.m1_subset_1 (k3_sin_cos2 X0) k1_numbers \quad (7)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (k3_sin_cos5 X0 = k10_real_1 np_1 (k3_sin_cos2 X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (k2_sin_cos5 X0 = k10_real_1 np_1 (k6_sin_cos2 X0)) \quad (9)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (k1_sin_cos5 X0 = k10_real_1 (k6_sin_cos2 X0) (k3_sin_cos2 X0)) \quad (10)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xcmplx_0 X0) \quad (11)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (12)$$

Theorem 1

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((k3_sin_cos2 X0 = k7_xcmplx_0 np_1 (k3_sin_cos5 X0)) \wedge ((k6_sin_cos2 X0 = k7_xcmplx_0 np_1 (k2_sin_cos5 X0)) \wedge (k9_sin_cos2 X0 = k7_xcmplx_0 np_1 (k1_sin_cos5 X0))))$$