

t25_sin_cos (TMMqkctbXHoKEAsaCuCjGT-
sJpW8gH5h8McP)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k15_sin_cos : \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_complex1 : \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k21_sin_cos : \iota \Rightarrow \iota$ be given. Let $k18_sin_cos : \iota \Rightarrow \iota$ be given. Let $k1_xcmplx_0 : \iota$ be given. Let $k20_sin_cos : \iota \Rightarrow \iota$ be given. Let $k17_sin_cos : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k14_sin_cos : \iota \Rightarrow \iota$ be given. Let $k11_comseq_3 : \iota \Rightarrow \iota$ be given. Let $k3_sin_cos : \iota \Rightarrow \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19_sin_cos : \iota$ be given. Let $k16_sin_cos : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k13_sin_cos : \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_numbers : \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$k7_complex1 = k1_xcmplx_0 \quad (1)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k21_sin_cos X0 = k20_sin_cos X0) \quad (2)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k18_sin_cos X0 = k17_sin_cos X0) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k15_sin_cos X0 = k14_sin_cos X0) \quad (4)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k11_comseq_3 (k3_sin_cos (k3_xcmplx_0 X0 k7_complex1)) = k2_xcmplx_0 (k1_seq_1 k19_sin_cos X0) (k3_xcmplx_0 (k1_seq_1 k16_sin_cos X0) k7_complex1)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0)\wedge(v1_xcmplx_0 X1))\Rightarrow(v1_xcmplx_0 (k3_xcmplx_0 X0 X1)) \quad (6)$$

Assume the following.

$$v1_xcmplx_0 k1_xcmplx_0 \quad (7)$$

Assume the following.

$$(v1_funct_1 k13_sin_cos)\wedge((v1_funct_2 k13_sin_cos k2_numbers k2_numbers)\wedge(m1_subset_1 k13_sin_cos (k1_zfmisc_1 (k2_zfmisc_1 k2_numbers k2_numbers)))) \quad (8)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(k20_sin_cos X0 = k1_seq_1 k19_sin_cos X0) \quad (9)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(k17_sin_cos X0 = k1_seq_1 k16_sin_cos X0) \quad (10)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0)\Rightarrow(k14_sin_cos X0 = k1_funct_1 k13_sin_cos X0) \quad (11)$$

Assume the following.

$$\begin{aligned} &\forall X0.((v1_funct_1 X0)\wedge((v1_funct_2 X0 k2_numbers k2_numbers)\wedge \\ &(m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k2_numbers k2_numbers))))\Rightarrow \\ &((X0 = k13_sin_cos)\Leftrightarrow(\forall X1.(v1_xcmplx_0 X1)\Rightarrow(k1_funct_1 \\ &X0 X1 = k11_comseq_3 (k3_sin_cos X1)))) \end{aligned} \quad (12)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xreal_0 X0) \quad (13)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xcmplx_0 X0) \quad (14)$$

Theorem 1

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(k15_sin_cos (k3_xcmplx_0 X0 k7_complex1) = k2_xcmplx_0 (k21_sin_cos X0) (k3_xcmplx_0 (k18_sin_cos X0) k7_complex1))$$