

t49_sin_cos
(TMb5QquySmVaWCfWhFTVepodK9hNSYq8CsP)

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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 $k26_sin_cos : \iota \Rightarrow \iota$ be given. Let $k25_sin_cos : \iota \Rightarrow \iota$ 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 $k4_series_1 : \iota \Rightarrow \iota$ be given. Let $k4_sin_cos : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k24_sin_cos : \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13_sin_cos : \iota$ be given. Let $k2_numbers : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k26_sin_cos X0 = k25_sin_cos X0) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k15_sin_cos X0 = k14_sin_cos X0) \quad (2)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k11_comseq_3 (k3_sin_cos X0) = k4_series_1 (k4_sin_cos X0)) \quad (3)$$

Assume the following.

$$(v1_funct_1 k24_sin_cos) \wedge ((v1_funct_2 k24_sin_cos k1_numbers k1_numbers) \wedge (m1_subset_1 k24_sin_cos (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \quad (4)$$

Assume the following.

$$(v1_funct_1 k13_sin_cos) \wedge ((v1_funct_2 k13_sin_cos k2_numbers k2_numbers) \wedge (m1_subset_1 k13_sin_cos (k1_zfmisc_1 (k2_zfmisc_1 k2_numbers k2_numbers)))) \quad (5)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (k25_sin_cos X0 = k1_seq_1 k24_sin_cos X0) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k1_numbers k1_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))))) \Rightarrow \\ & ((X0 = k24_sin_cos) \Leftrightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (k1_seq_1 X0 \\ & X1 = k4_series_1 (k4_sin_cos X1)))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k14_sin_cos X0 = k1_funct_1 k13_sin_cos X0) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_funct_1 X0) \wedge ((v1_funct_2 X0 k2_numbers k2_numbers) \wedge \\ & (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k2_numbers k2_numbers)))))) \Rightarrow \\ & ((X0 = k13_sin_cos) \Leftrightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (k1_funct_1 \\ & X0 X1 = k11_comseq_3 (k3_sin_cos X1)))) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (10)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xcmplx_0 X0) \quad (11)$$

Theorem 1

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k15_sin_cos X0 = k26_sin_cos X0)$$