

t78_sin_cos6 (TMND-
brYRQ58nnVp9ys8xVEhrcWf3DNyDz4P)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k3_sin_cos6 : \iota \Rightarrow \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k32_sin_cos : \iota$ be given. Let $np_2 : \iota$ be given. Let $k17_sin_cos : \iota \Rightarrow \iota$ be given. Let $k18_sin_cos : \iota \Rightarrow \iota$ be given. Let $k21_sin_cos : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k20_sin_cos : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow & (((r1_xxreal_0 (k1_real_1 np_1) \\ X0) \wedge (r1_xxreal_0 X0 np_1)) \Rightarrow & ((r1_xxreal_0 (k1_real_1 (k10_real_1 \\ k32_sin_cos np_2)) (k3_sin_cos6 X0)) \wedge & (r1_xxreal_0 (k3_sin_cos6 \\ X0) (k10_real_1 k32_sin_cos np_2)))) & \end{aligned} \quad (1)$$

Assume the following.

$$k3_sin_cos6 np_1 = k10_real_1 k32_sin_cos np_2 \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow & (((r1_xxreal_0 (k1_real_1 (k10_real_1 \\ k32_sin_cos np_2)) X0) \wedge (r1_xxreal_0 X0 (k10_real_1 k32_sin_cos \\ np_2))) \Rightarrow & (k3_sin_cos6 (k17_sin_cos X0) = X0)) & \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow & (((r1_xxreal_0 (k1_real_1 np_1) \\ X0) \wedge (r1_xxreal_0 X0 np_1)) \Rightarrow & (k18_sin_cos (k3_sin_cos6 X0) = X0)) & \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow & ((k21_sin_cos k6_numbers = np_1) \wedge \\ ((k18_sin_cos k6_numbers = k6_numbers) \wedge & ((k20_sin_cos (k4_xcmplx_0 \\ X0) = k20_sin_cos X0) \wedge (k17_sin_cos (k4_xcmplx_0 X0) = k4_xcmplx_0 \\ (k17_sin_cos X0)))))) & \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \Leftrightarrow (r1_xxreal_0 (k4_xcmplx_0 X1) (k4_xcmplx_0 X0)))) \quad (6)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k1_real_1 X0 = k4_xcmplx_0 X0) \quad (7)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k18_sin_cos X0 = k17_sin_cos X0) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k1_real_1 (k1_real_1 X0) = X0) \quad (9)$$

Assume the following.

$$\forall X0.m1_subset_1 (k3_sin_cos6 X0) k1_numbers \quad (10)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (m1_subset_1 (k1_real_1 X0) k1_numbers) \quad (11)$$

Assume the following.

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

Theorem 1

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (((r1_xxreal_0 (k1_real_1 np_1) X0) \wedge (r1_xxreal_0 X0 np_1)) \Rightarrow (k3_sin_cos6 X0 = k1_real_1 (k3_sin_cos6 (k4_xcmplx_0 X0))))$$