

t12_sincos10 (TMP- KDbbH8gTQTC6Vc2WnH3BsZDWGVWvQEGq)

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Let $v1_fcont_1 : \iota \Rightarrow o$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k2_fdiff_9 : \iota$ be given. Let $k2_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ 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 $r2_fdiff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_fdiff_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k19_sin_cos : \iota$ be given. Let $k5_square_1 : \iota \Rightarrow \iota$ be given. Let $k16_sin_cos : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & (r2_fdiff_1 \ k2_fdiff_9 \ (k2_rcomp_1 \ k6_numbers \ (k10_real_1 \ k32_sin_cos \\
 & \quad np_2))) \wedge (\forall X0. (m1_subset_1 \ X0 \ k1_numbers) \Rightarrow ((X0 \in k2_rcomp_1 \\
 & \quad k6_numbers \ (k10_real_1 \ k32_sin_cos \ np_2)) \Rightarrow (k1_fdiff_1 \ k2_fdiff_9 \\
 & \quad X0 = k1_real_1 \ (k10_real_1 \ (k1_seq_1 \ k19_sin_cos \ X0) \ (k5_square_1 \\
 & \quad \quad (k1_seq_1 \ k16_sin_cos \ X0))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. ((v1_funct_1 \ X1) \wedge (m1_subset_1 \ X1 \ (k1_zfmisc_1 \\
 & \quad (k2_zfmisc_1 \ k1_numbers \ k1_numbers)))) \Rightarrow ((r2_fdiff_1 \ X1 \ X0) \Rightarrow \\
 & \quad (v1_fcont_1 \ (k2_partfun1 \ k1_numbers \ k1_numbers \ X1 \ X0)))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
 & (v1_funct_1 \ k2_fdiff_9) \wedge (m1_subset_1 \ k2_fdiff_9 \ (k1_zfmisc_1 \\
 & \quad (k2_zfmisc_1 \ k1_numbers \ k1_numbers)))
 \end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned}
 & v1_fcont_1 \ (k2_partfun1 \ k1_numbers \ k1_numbers \ k2_fdiff_9 \ (k2_rcomp_1 \\
 & \quad k6_numbers \ (k10_real_1 \ k32_sin_cos \ np_2)))
 \end{aligned}$$