

t40_sin_cos2 (TMVoVenKY-
CmTJMxru27g2b9iWifnM6prPKH)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_fcont_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_sin_cos2 : \iota$ be given. Let $r1_fdiff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_fdiff_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k5_square_1 : \iota \Rightarrow \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_sin_cos2 : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((r1_fdiff_1 k7_sin_cos2 X0) \wedge (k1_fdiff_1 k7_sin_cos2 X0 = k10_real_1 np_1 (k5_square_1 (k1_seq_1 k4_sin_cos2 X0)))) \quad (1)$$

Assume the following.

$$\forall X0.((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((r1_fdiff_1 X0 X1) \Rightarrow (r1_fcont_1 X0 X1))) \quad (2)$$

Assume the following.

$$(v1_funct_1 k7_sin_cos2) \wedge ((v1_funct_2 k7_sin_cos2 k1_numbers k1_numbers) \wedge (m1_subset_1 k7_sin_cos2 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \quad (3)$$

Theorem 1 $\forall X0.(v1_xreal_0 X0) \Rightarrow (r1_fcont_1 k7_sin_cos2 X0).$