

t3_sin_cos8

(TMJbc4UgRYr77AbocdnFwX9AAJEYd6pAQpZ)

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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 $k2_sin_cos5 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $k7_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_sin_cos2 : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k6_sin_cos2 : \iota \Rightarrow \iota$ be given. Let $k5_sin_cos2 : \iota \Rightarrow \iota$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_sin_cos2 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Assume the following.

$$m1_subset_1 \ k1_xboole_0 \ k4_ordinal1 \tag{1}$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0) \Rightarrow (\forall X1.(v1_xreal_0 \ X1) \Rightarrow (((r1_xxreal_0 \ k6_numbers \ X0) \wedge (r1_xxreal_0 \ X0 \ X1)) \Rightarrow (r1_xxreal_0 \ (k7_xcmplx_0 \ X0 \ X1) \ np_1))) \tag{2}$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0) \Rightarrow ((k1_seq_1 \ k4_sin_cos2 \ X0 \neq k6_numbers) \wedge ((\neg r1_xxreal_0 \ (k1_seq_1 \ k4_sin_cos2 \ X0) \ k6_numbers) \wedge (k1_seq_1 \ k4_sin_cos2 \ k6_numbers = np_1))) \tag{3}$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0) \Rightarrow (\forall X1.(v1_xreal_0 \ X1) \Rightarrow (\neg(\neg r1_xxreal_0 \ X0 \ k6_numbers) \wedge ((\neg r1_xxreal_0 \ X1 \ k6_numbers) \wedge (r1_xxreal_0 \ (k7_xcmplx_0 \ X0 \ X1) \ k6_numbers)))) \tag{4}$$

Assume the following.

$$((v2_xxreal_0 \ np_1) \wedge (m2_subset_1 \ np_1 \ k1_numbers \ k5_numbers)) \wedge ((m1_subset_1 \ np_1 \ k5_numbers) \wedge (m1_subset_1 \ np_1 \ k1_numbers)) \tag{5}$$

Assume the following.

$$k7_xcmplx_0 \ np_1 \ np_1 = np_1 \quad (6)$$

Assume the following.

$$\forall X0.k6_sin_cos2 \ X0 = k5_sin_cos2 \ X0 \quad (7)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (8)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 \ X0 \ k1_numbers)\wedge(v1_xreal_0 \ X1))\Rightarrow(k10_real_1 \ X0 \ X1 = k7_xcmplx_0 \ X0 \ X1) \quad (10)$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0)\Rightarrow((r1_xxreal_0 \ np_1 \ (k6_sin_cos2 \ X0))\wedge((k6_sin_cos2 \ k6_numbers = np_1)\wedge(k3_sin_cos2 \ k6_numbers = k6_numbers))) \quad (11)$$

Assume the following.

$$\forall X0.m1_subset_1 \ (k6_sin_cos2 \ X0) \ k1_numbers \quad (12)$$

Assume the following.

$$m1_subset_1 \ k5_numbers \ (k1_zfmisc_1 \ k1_numbers) \quad (13)$$

Assume the following.

$$\forall X0.k5_sin_cos2 \ X0 = k1_seq_1 \ k4_sin_cos2 \ X0 \quad (14)$$

Assume the following.

$$\forall X0.(v1_xreal_0 \ X0)\Rightarrow(k2_sin_cos5 \ X0 = k10_real_1 \ np_1 \ (k6_sin_cos2 \ X0)) \quad (15)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 \ X0)\wedge(v1_xxreal_0 \ X1))\Rightarrow((r1_xxreal_0 \ X0 \ X1)\vee(r1_xxreal_0 \ X1 \ X0)) \quad (16)$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ (k1_zfmisc_1 \ k1_numbers))\Rightarrow(v3_membered \ X0) \quad (17)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \quad (18)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (19)$$

Assume the following.

$$\forall X0.(v3_membered X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow (v1_xreal_0 X1)) \quad (20)$$

Theorem 1

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow & ((r1_xxreal_0 (k2_sin_cos5 X0) np_1) \wedge \\ & ((\neg r1_xxreal_0 (k2_sin_cos5 X0) k6_numbers) \wedge (k2_sin_cos5 k6_numbers = \\ & \quad np_1))) \end{aligned}$$