

t4_sin_cos8 (TMLGYqN-
EvEwtN2pLT5bRLAtyHgPQLJ91DLv)

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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 $k6_numbers : \iota$ be given. Let $k9_sin_cos2 : \iota \Rightarrow \iota$ be given. Let $k3_sin_cos2 : \iota \Rightarrow \iota$ be given. Let $k7_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_sin_cos2 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k1_numbers : \iota$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((r1_xxreal_0 k6_numbers X0) \Rightarrow (r1_xxreal_0 k6_numbers (k3_sin_cos2 X0))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((k9_sin_cos2 X0 = k7_xcmplx_0 (k3_sin_cos2 X0) (k6_sin_cos2 X0)) \wedge (k9_sin_cos2 k6_numbers = k6_numbers)) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (((r1_xxreal_0 k6_numbers X0) \wedge (r1_xxreal_0 k6_numbers X1)) \Rightarrow (r1_xxreal_0 k6_numbers (k7_xcmplx_0 X0 X1)))) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2.(v1_xreal_0 X2) \Rightarrow (((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X2)) \Rightarrow (r1_xxreal_0 X0 X2)))) \quad (4)$$

Assume the following.

$$m1_subset_1 np_1 k1_numbers \quad (5)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((r1_xxreal_0 np_1 (k6_sin_cos2 X0)) \wedge ((k6_sin_cos2 k6_numbers = np_1) \wedge (k3_sin_cos2 k6_numbers = k6_numbers))) \quad (6)$$

Assume the following.

$$r1_xreal_0 \ k6_numbers \ np_1 \tag{7}$$

Assume the following.

$$\forall X0.m1_subset_1 \ (k9_sin_cos2 \ X0) \ k1_numbers \tag{8}$$

Assume the following.

$$\forall X0.m1_subset_1 \ (k6_sin_cos2 \ X0) \ k1_numbers \tag{9}$$

Assume the following.

$$\forall X0.m1_subset_1 \ (k3_sin_cos2 \ X0) \ k1_numbers \tag{10}$$

Assume the following.

$$\forall X0.(m1_subset_1 \ X0 \ k1_numbers) \Rightarrow (v1_xreal_0 \ X0) \tag{11}$$

Theorem 1

$$\forall X0.(v1_xreal_0 \ X0) \Rightarrow ((r1_xreal_0 \ k6_numbers \ X0) \Rightarrow (r1_xreal_0 \ k6_numbers \ (k9_sin_cos2 \ X0)))$$