

l10_sin_cos6 (TMcJXaNbzQH- MzFd8azd4Ks4UkMhNXNWC8Bn)

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Let $k1_{rcomp_1} : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_{real_1} : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k32_{sin_cos} : \iota$ be given. Let $k8_{real_1} : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \neg (X0 \neq k1_xboole_0) \wedge (\forall X1. \neg X1 \in X0) \quad (1)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0 X0) \Rightarrow (k3_xcmplx_0 X0 \ k6_numbers = k6_numbers) \quad (2)$$

Assume the following.

$$\forall X0. (v1_xcmplx_0 X0) \Rightarrow (k2_xcmplx_0 X0 \ k6_numbers = X0) \quad (3)$$

Assume the following.

$$\begin{aligned} & ((v2_xxreal_0 np_2) \wedge (m2_subset_1 np_2 \ k1_numbers \ k5_numbers)) \wedge \\ & ((m1_subset_1 np_2 \ k5_numbers) \wedge (m1_subset_1 np_2 \ k1_numbers)) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 X0 \ k1_numbers) \wedge (v1_xreal_0 X1)) \Rightarrow (k8_{real_1} X0 \ X1 = k3_xcmplx_0 X0 \ X1) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. ((m1_subset_1 X0 \ k1_numbers) \wedge (v1_xreal_0 X1)) \Rightarrow (k7_{real_1} X0 \ X1 = k2_xcmplx_0 X0 \ X1) \quad (6)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (7)$$

Assume the following.

$$\exists X0.(v1_xboole_0 X0) \wedge ((v1_xcmplx_0 X0) \wedge ((v1_xxreal_0 X0) \wedge (v1_xreal_0 X0))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers) \wedge (v1_xreal_0 X1)) \Rightarrow (m1_subset_1 (k8_real_1 X0 X1) k1_numbers) \quad (9)$$

Assume the following.

$$m1_subset_1 k32_sin_cos k1_numbers \quad (10)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Leftrightarrow (\forall X1.\neg X1 \in X0) \quad (11)$$

Assume the following.

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

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xcmplx_0 X0) \quad (13)$$

Theorem 1

$$\begin{aligned} & k1_rcomp_1 (k7_real_1 k32_sin_cos (k8_real_1 (k8_real_1 np_2 \\ & k32_sin_cos) k6_numbers)) (k7_real_1 (k8_real_1 np_2 k32_sin_cos) \\ & (k8_real_1 (k8_real_1 np_2 k32_sin_cos) k6_numbers)) = k1_rcomp_1 \\ & k32_sin_cos (k8_real_1 np_2 k32_sin_cos) \end{aligned}$$