

t94_sin_cos6

(TMX88jfd6fvYVHBPYYuTgFhif8CNkMmwGPX)

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Let $k6_sin_cos6 : \iota \Rightarrow \iota$ 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 $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k20_sin_cos : \iota \Rightarrow \iota$ be given. Let $k21_sin_cos : \iota \Rightarrow \iota$ be given. Let $k18_sin_cos : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $k7_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $np_3 : \iota$ 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 $np_0 : \iota$ be given. Let $k31_sin_cos : \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (((r1_xxreal_0 k6_numbers X0) \wedge (r1_xxreal_0 X0 k32_sin_cos)) \Rightarrow (k6_sin_cos6 (k20_sin_cos X0) = X0)) \quad (1)$$

Assume the following.

$$\begin{aligned} & (k21_sin_cos (k10_real_1 k32_sin_cos np_2) = k6_numbers) \wedge ((\\ & k18_sin_cos (k10_real_1 k32_sin_cos np_2) = np_1) \wedge ((k21_sin_cos \\ & k32_sin_cos = k1_real_1 np_1) \wedge ((k18_sin_cos k32_sin_cos = k6_numbers) \wedge \\ & ((k21_sin_cos (k7_real_1 k32_sin_cos (k10_real_1 k32_sin_cos \\ & np_2)) = k6_numbers) \wedge ((k18_sin_cos (k7_real_1 k32_sin_cos (\\ & k10_real_1 k32_sin_cos np_2)) = k1_real_1 np_1) \wedge ((k21_sin_cos \\ & (k8_real_1 np_2 k32_sin_cos) = np_1) \wedge (k18_sin_cos (k8_real_1 \\ & np_2 k32_sin_cos) = k6_numbers)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (3)$$

Assume the following.

$$\begin{aligned}
& (\neg r1_xreal_0 (k10_real_1 k32_sin_cos np_2) k6_numbers) \wedge ((\\
& \quad \neg r1_xreal_0 k32_sin_cos (k10_real_1 k32_sin_cos np_2)) \wedge ((\\
& \neg r1_xreal_0 k32_sin_cos k6_numbers) \wedge ((\neg r1_xreal_0 (k10_real_1 \\
& \quad k32_sin_cos np_2) (k1_real_1 (k10_real_1 k32_sin_cos np_2))) \wedge \\
& \quad ((\neg r1_xreal_0 (k8_real_1 np_2 k32_sin_cos) k32_sin_cos) \wedge (\\
& \quad (\neg r1_xreal_0 (k8_real_1 (k10_real_1 np_3 np_2) k32_sin_cos) \\
& \quad (k10_real_1 k32_sin_cos np_2)) \wedge ((\neg r1_xreal_0 k6_numbers (\\
& \quad k1_real_1 (k10_real_1 k32_sin_cos np_2))) \wedge ((\neg r1_xreal_0 (\\
& \quad k8_real_1 np_2 k32_sin_cos) k6_numbers) \wedge ((\neg r1_xreal_0 (k8_real_1 \\
& \quad (k10_real_1 np_3 np_2) k32_sin_cos) k32_sin_cos) \wedge ((\neg r1_xreal_0 \\
& \quad (k8_real_1 np_2 k32_sin_cos) (k8_real_1 (k10_real_1 np_3 np_2) \\
& \quad k32_sin_cos)) \wedge (\neg r1_xreal_0 (k8_real_1 (k10_real_1 np_3 np_2) \\
& \quad k32_sin_cos) k6_numbers))))))))))
\end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& ((v2_xreal_0 np_2) \wedge (m2_subset_1 np_2 k1_numbers k5_numbers)) \wedge \\
& ((m1_subset_1 np_2 k5_numbers) \wedge (m1_subset_1 np_2 k1_numbers))
\end{aligned} \tag{5}$$

Assume the following.

$$v1_xboole_0 np_0 \tag{6}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{7}$$

Assume the following.

$$k32_sin_cos = k31_sin_cos \tag{8}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (k21_sin_cos X0 = k20_sin_cos X0) \tag{9}$$

Assume the following.

$$\exists X0.(v1_xboole_0 X0) \wedge ((v1_xcmplx_0 X0) \wedge ((v1_xreal_0 X0) \wedge (v1_xreal_0 X0))) \tag{10}$$

Assume the following.

$$m1_subset_1 k32_sin_cos k1_numbers \tag{11}$$

Assume the following.

$$v1_xreal_0 k31_sin_cos \tag{12}$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k1_numbers)\wedge(v1_xreal_0 X1))\Rightarrow(m1_subset_1 (k10_real_1 X0 X1) k1_numbers) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0)\wedge(v1_xxreal_0 X1))\Rightarrow(r1_xxreal_0 X0 X1)\vee(r1_xxreal_0 X1 X0) \quad (14)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0)\Rightarrow(v1_xxreal_0 X0) \quad (15)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers)\Rightarrow(v1_xreal_0 X0) \quad (16)$$

Theorem 1 $k6_sin_cos6 k6_numbers = k10_real_1 k32_sin_cos np_2$.