

t9_sin_cos7

(TMd2N7ETLhpkdXyzEKLw5X2qPH5uAzZSFqR)

October 27, 2020

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 $np_1 : \iota$ be given. Let $k12_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_square_1 : \iota \Rightarrow \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (((r1_xxreal_0 \\ k6_numbers X0) \wedge (r1_xxreal_0 np_1 X1)) \Rightarrow (r1_xxreal_0 k6_numbers \\ (k12_binop_2 (k10_binop_2 X1 np_1) X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow ((\neg r1_xxreal_0 np_1 (k3_square_1 \\ X0)) \Rightarrow ((\neg r1_xxreal_0 X0 (k4_xcmplx_0 np_1)) \wedge (\neg r1_xxreal_0 np_1 \\ X0))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xreal_0 (k3_square_1 X0)) \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (((r1_xxreal_0 \\ k6_numbers X0) \wedge (r1_xxreal_0 np_1 X1)) \Rightarrow (r1_xxreal_0 k6_numbers \\ (k12_binop_2 (k10_binop_2 (k3_square_1 X1) np_1) X0)))) \end{aligned}$$