

l21_sin_cos7 (TMHHXaUn- sjEr5RHNGWiQjoeSEET8rLLsZp)

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 $k10_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_square_1 : \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_binop_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (r1_xxreal_0 k6_numbers (k3_xcmplx_0 X0 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\neg(\neg r1_xxreal_0 X0 k6_numbers) \wedge (\neg r1_xxreal_0 np_1 X0) \wedge (r1_xxreal_0 np_1 (k3_square_1 X0)))) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\neg(\neg r1_xxreal_0 X0 k6_numbers) \wedge (\neg r1_xxreal_0 k6_numbers X1) \wedge (r1_xxreal_0 k6_numbers (k3_xcmplx_0 X0 X1)))) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\neg(k6_numbers \neq X0) \wedge (r1_xxreal_0 (k3_square_1 X0) k6_numbers)) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((\neg r1_xxreal_0 np_1 (k3_square_1 X0)) \Rightarrow ((\neg r1_xxreal_0 (k9_binop_2 X0 np_1) k6_numbers) \wedge (\neg r1_xxreal_0 (k10_binop_2 np_1 X0) k6_numbers))) \quad (5)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xreal_0 (k3_square_1 X0)) \quad (6)$$

Theorem 1

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\neg(\neg r1_xxreal_0 X0 k6_numbers) \wedge (\neg r1_xxreal_0 np_1 X0) \wedge (r1_xxreal_0 (k10_binop_2 np_1 (k3_square_1 X0)) k6_numbers)))$$