

l98_sincos10 (TM-
Mzf3x6gLwuFPwpGYx8oH3JVrW8eDjDdqH)

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Let $v5_valued_0 : \iota \Rightarrow o$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k1_fdiff_9 : \iota$ be given. Let $k1_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $np_4 : \iota$ be given. Let $k32_sin_cos : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_funct_1 X2) \wedge (m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow (((r1_tarski \\ & X0 X1) \wedge (v5_valued_0 (k2_partfun1 k1_numbers k1_numbers X2 X1))) \Rightarrow \\ & (v5_valued_0 (k2_partfun1 k1_numbers k1_numbers X2 X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & v5_valued_0 (k2_partfun1 k1_numbers k1_numbers k1_fdiff_9 (k4_rcomp_1 \\ & (k10_real_1 k32_sin_cos np_2) k32_sin_cos)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1_funct_1 X2) \wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \Rightarrow (k2_partfun1 \\ & X0 X1 X2 X3 = k5_relat_1 X2 X3) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & r1_tarski (k1_rcomp_1 (k8_real_1 (k10_real_1 np_3 np_4) k32_sin_cos) \\ & k32_sin_cos) (k4_rcomp_1 (k10_real_1 k32_sin_cos np_2) k32_sin_cos) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_funct_1 X0) \wedge ((v5_valued_0 X0) \wedge (m1_subset_1 \\ & X0 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))))) \Rightarrow ((v1_funct_1 \\ & (k5_relat_1 X0 X1)) \wedge (v5_valued_0 (k5_relat_1 X0 X1))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v1_funct_1 X2)\wedge \\ & (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))))\Rightarrow((v1_funct_1 \\ & (k2_partfun1 X0 X1 X2 X3))\wedge(m1_subset_1 (k2_partfun1 X0 X1 X2 X3) \\ & (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned} & (v1_funct_1 k1_fdiff_9)\wedge(m1_subset_1 k1_fdiff_9 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k1_numbers k1_numbers))) \end{aligned} \tag{7}$$

Theorem 1

$$\begin{aligned} & v5_valued_0 (k2_partfun1 k1_numbers k1_numbers (k2_partfun1 \\ & k1_numbers k1_numbers k1_fdiff_9 (k1_rcomp_1 (k8_real_1 (k10_real_1 \\ & np_3 np_4) k32_sin_cos) k32_sin_cos)) (k1_rcomp_1 (k8_real_1 \\ & (k10_real_1 np_3 np_4) k32_sin_cos) k32_sin_cos)) \end{aligned}$$