

t62_sincos10

(TMa1jBBune2pQspCb9Z3FRYGPH9fBDKPCfp)

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Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k4_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k2_sincos10 : \iota$ be given. Let $k1_partfun2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v2_funct_1 : \iota \Rightarrow o$ be given. Let $k2_funct_1 : \iota \Rightarrow \iota$ be given. Let $k4_relat_1 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ 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 $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow ((v2_funct_1 X0) \Rightarrow \\ & ((k3_relat_1 X0 (k2_funct_1 X0) = k4_relat_1 (k9_xtuple_0 X0)) \wedge \\ & (k3_relat_1 (k2_funct_1 X0) X0 = k4_relat_1 (k10_xtuple_0 X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$k2_relset_1 k1_numbers k2_sincos10 = k4_rcomp_1 (k10_real_1 k32_sin_cos np_2) k32_sin_cos \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v5_relat_1 X1 X0)) \Rightarrow (k2_relset_1 X0 X1 = k10_xtuple_0 X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X0))) \Rightarrow (k1_partfun2 X0 X1 = k4_relat_1 X1) \quad (4)$$

Assume the following.

$$k2_funct_1 k2_sincos10 = k2_partfun1 k1_numbers k1_numbers k1_fdiff_9 (k4_rcomp_1 (k10_real_1 k32_sin_cos np_2) k32_sin_cos) \quad (5)$$

Assume the following.

$$(v1_funct_1\ k2_sincos10)\wedge(v2_funct_1\ k2_sincos10) \quad (6)$$

Assume the following.

$$\neg v1_xboole_0\ k1_numbers \quad (7)$$

Assume the following.

$$(v1_funct_1\ k2_sincos10)\wedge(m1_subset_1\ k2_sincos10\ (k1_zfmisc_1\ (k2_zfmisc_1\ k1_numbers\ k1_numbers))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1\ X1)\wedge(v5_relat_1\ X1\ X0))\Rightarrow(m1_subset_1\ (k2_relset_1\ X0\ X1)\ (k1_zfmisc_1\ X0)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))\Rightarrow((v4_relat_1\ X2\ X0)\wedge(v5_relat_1\ X2\ X1)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))\Rightarrow(v1_relat_1\ X2) \quad (11)$$

Theorem 1

$$k3_relat_1\ (k2_partfun1\ k1_numbers\ k1_numbers\ k1_fdiff_9\ (k4_rcomp_1\ (k10_real_1\ k32_sin_cos\ np_2)\ k32_sin_cos))\ k2_sincos10 = k1_partfun2\ k1_numbers\ (k4_rcomp_1\ (k10_real_1\ k32_sin_cos\ np_2)\ k32_sin_cos)$$