

t59_sincos10

(TMTw8NgDg8Yj2WL8YpdtoENqaffTyuQNccc)

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Let $k1_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_sincos10 : \iota$ be given. Let $k1_rcomp_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $k7_square_1 : \iota \Rightarrow \iota$ be given. Let $np_2 : \iota$ be given. Let $np_1 : \iota$ be given. Let $k2_fdiff_9 : \iota$ be given. Let $k10_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k32_sin_cos : \iota$ be given. Let $np_4 : \iota$ be given. Let $k1_partfun2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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. Assume the following.

$$\begin{aligned}
 & k3_relat_1 (k2_partfun1\ k1_numbers\ k1_numbers\ k3_sincos10\ (k1_rcomp_1 \\
 & \quad (k1_real_1\ (k7_square_1\ np_2))\ (k1_real_1\ np_1)))\ (k2_partfun1 \\
 & \quad k1_numbers\ k1_numbers\ k2_fdiff_9\ (k1_rcomp_1\ (k1_real_1\ (k10_real_1 \\
 & \quad \quad k32_sin_cos\ np_2))\ (k1_real_1\ (k10_real_1\ k32_sin_cos\ np_4)))) = \\
 & \quad k1_partfun2\ k1_numbers\ (k1_rcomp_1\ (k1_real_1\ (k7_square_1\ np_2)) \\
 & \quad \quad (k1_real_1\ np_1))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5. \\
 & \quad (((v1_funct_1\ X4) \wedge (m1_subset_1\ X4\ (k1_zfmisc_1\ (k2_zfmisc_1 \\
 & \quad X0\ X1)))) \wedge ((v1_funct_1\ X5) \wedge (m1_subset_1\ X5\ (k1_zfmisc_1\ (k2_zfmisc_1 \\
 & \quad X2\ X3)))))) \Rightarrow (k1_partfun1\ X0\ X1\ X2\ X3\ X4\ X5 = k3_relat_1\ X4\ X5)
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
 & (v1_funct_1\ k3_sincos10) \wedge (m1_subset_1\ k3_sincos10\ (k1_zfmisc_1 \\
 & \quad (k2_zfmisc_1\ k1_numbers\ k1_numbers)))
 \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.\forall X1.\forall X2.\forall X3.((v1_funct_1\ X2) \wedge \\
 & \quad (m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))) \Rightarrow ((v1_funct_1 \\
 & \quad (k2_partfun1\ X0\ X1\ X2\ X3)) \wedge (m1_subset_1\ (k2_partfun1\ X0\ X1\ X2\ X3) \\
 & \quad \quad (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1))))
 \end{aligned} \tag{4}$$

Assume the following.

$$(v1_funct_1 k2_fdiff_9) \wedge (m1_subset_1 k2_fdiff_9 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers))) \quad (5)$$

Theorem 1

$$k1_partfun1 k1_numbers k1_numbers k1_numbers k1_numbers (k2_partfun1 k1_numbers k1_numbers k3_sincos10 (k1_rcomp_1 (k1_real_1 (k7_square_1 np_2)) (k1_real_1 np_1))) (k2_partfun1 k1_numbers k1_numbers k2_fdiff_9 (k1_rcomp_1 (k1_real_1 (k10_real_1 k32_sin_cos np_2)) (k1_real_1 (k10_real_1 k32_sin_cos np_4)))) = k1_partfun2 k1_numbers (k1_rcomp_1 (k1_real_1 (k7_square_1 np_2)) (k1_real_1 np_1))$$