

t27_integra8 (TM-
GYAvNyU1RB3edKYOT5YJM4uF7CLaJxPXv)

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Let $k2_fdiff_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_sin_cos : \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k19_sin_cos : \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r2_fdiff_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_fdiff_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_seq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((r2_fdiff_1 k16_sin_cos k1_numbers) \wedge (k1_fdiff_1 k16_sin_cos X0 = k1_seq_1 k19_sin_cos X0)) \quad (1)$$

Assume the following.

$$(k1_relset_1 k1_numbers k16_sin_cos = k1_numbers) \wedge ((k1_relset_1 k1_numbers k19_sin_cos = k1_numbers)) \quad (2)$$

Assume the following.

$$\exists X0.(m1_subset_1 X0 k1_numbers) \wedge ((v1_xxreal_0 X0) \wedge ((v1_xcmplx_0 X0) \wedge ((v1_xreal_0 X0) \wedge (v1_int_1 X0)))) \quad (3)$$

Assume the following.

$$(v1_funct_1 k19_sin_cos) \wedge ((v1_funct_2 k19_sin_cos k1_numbers k1_numbers) \wedge (m1_subset_1 k19_sin_cos (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \quad (4)$$

Assume the following.

$$(v1_funct_1 k16_sin_cos) \wedge ((v1_funct_2 k16_sin_cos k1_numbers k1_numbers) \wedge (m1_subset_1 k16_sin_cos (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \quad (5)$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1_funct_1 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 (k2_zfmisc_1 \\
& \quad k1_numbers k1_numbers)))) \Rightarrow (\forall X1.(r2_diff_1 X0 X1) \Rightarrow (\forall X2. \\
& ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers \\
& \quad k1_numbers)))) \Rightarrow ((X2 = k2_diff_1 X0 X1) \Leftrightarrow ((k1_relset_1 k1_numbers \\
& \quad X2 = X1) \wedge (\forall X3.(m1_subset_1 X3 k1_numbers) \Rightarrow ((X3 \in X1) \Rightarrow (k1_seq_1 \\
& \quad X2 X3 = k1_diff_1 X0 X3))))))
\end{aligned} \tag{6}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \tag{7}$$

Theorem 1 $k2_diff_1 k16_sin_cos k1_numbers = k19_sin_cos.$