

l74_integra8

(TMWUrEfSrEuqkg4m4ohMaphSyKKBKveSefhy)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v2_measure5 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $r1_integra5 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_sin_cos2 : \iota$ be given. Let $v1_comseq_2 : \iota \Rightarrow o$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_sin_cos2 : \iota$ be given. Let $k7_sin_cos2 : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_fcont_1 : \iota \Rightarrow o$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarSKI X0 X1) \quad (1)$$

Assume the following.

$$(k1_relset_1 k1_numbers k1_sin_cos2 = k1_numbers) \wedge ((k1_relset_1 k1_numbers k4_sin_cos2 = k1_numbers) \wedge (k1_relset_1 k1_numbers k7_sin_cos2 = k1_numbers)) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v2_measure5 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow \\ & (((r1_tarSKI X0 (k1_relset_1 k1_numbers X1)) \wedge (v1_fcont_1 (k2_partfun1 k1_numbers k1_numbers X1 X0))) \Rightarrow (r1_integra5 X0 X1))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v2_measure5 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 k1_numbers)))) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers k1_numbers)))) \Rightarrow \\ & (((r1_tarSKI X0 (k1_relset_1 k1_numbers X1)) \wedge (v1_fcont_1 (k2_partfun1 k1_numbers k1_numbers X1 X0))) \Rightarrow (v1_comseq_2 (k2_partfun1 k1_numbers k1_numbers X1 X0))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.k9_setfam.1 X0 = k1_zfmisc.1 X0 \quad (5)$$

Assume the following.

$$\forall X0.((\neg v1_xboole.0 X0) \wedge ((v2_measure5 X0) \wedge (m1_subset.1 X0 (k1_zfmisc.1 k1_numbers)))) \Rightarrow (v1_fcont.1 (k2_partfun1 k1_numbers k1_numbers k4_sin_cos2 X0)) \quad (6)$$

Assume the following.

$$(v1_funct.1 k4_sin_cos2) \wedge ((v1_funct.2 k4_sin_cos2 k1_numbers k1_numbers) \wedge (m1_subset.1 k4_sin_cos2 (k1_zfmisc.1 (k2_zfmisc.1 k1_numbers k1_numbers)))) \quad (7)$$

Theorem 1

$$\forall X0.((\neg v1_xboole.0 X0) \wedge ((v2_measure5 X0) \wedge (m1_subset.1 X0 (k1_zfmisc.1 k1_numbers)))) \Rightarrow ((r1_integra5 X0 k4_sin_cos2) \wedge (v1_comseq.2 (k2_partfun1 k1_numbers k1_numbers k4_sin_cos2 X0)))$$