

t27_nfcont_4

(TMXrX7RyELCvwNJopDFx6NxRP8ehpSmzxJN)

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Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ 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 $k1_euclid : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_nfcont_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_integr15 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_integr15 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\
 & \forall X2. ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & \quad k1_numbers (k1_euclid X0)))))) \Rightarrow (\forall X3. ((v1_funct_1 X3) \wedge \\
 & (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers (k1_euclid \\
 & \quad X0)))))) \Rightarrow (((r1_tarski X1 (k9_subset_1 k1_numbers (k1_relset_1 \\
 & \quad k1_numbers X2) (k1_relset_1 k1_numbers X3))) \wedge ((v1_nfcont_4 (\\
 & \quad k2_partfun1 k1_numbers (k1_euclid X0) X2 X1) X0) \wedge (v1_nfcont_4 \\
 & \quad (k2_partfun1 k1_numbers (k1_euclid X0) X3 X1) X0))) \Rightarrow ((v1_nfcont_4 \\
 & \quad (k2_partfun1 k1_numbers (k1_euclid X0) (k7_integr15 X0 k1_numbers \\
 & \quad X2 X3) X1) X0) \wedge (v1_nfcont_4 (k2_partfun1 k1_numbers (k1_euclid \\
 & \quad X0) (k8_integr15 X0 k1_numbers X2 X3) X1) X0))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers) \Rightarrow (\forall X1. \\
 & \forall X2. \forall X3. ((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\
 & \quad (k2_zfmisc_1 k1_numbers (k1_euclid X0)))))) \Rightarrow (((v1_nfcont_4 (\\
 & \quad k2_partfun1 k1_numbers (k1_euclid X0) X3 X1) X0) \wedge (r1_tarski X2 \\
 & \quad X1)) \Rightarrow (v1_nfcont_4 (k2_partfun1 k1_numbers (k1_euclid X0) X3 X2) \\
 & \quad X0)))
 \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1_tarSKI X0 X1)\wedge(r1_tarSKI X1 X2))\Rightarrow(r1_tarSKI X0 X2) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1_tarSKI X0 X1)\wedge(r1_tarSKI X0 X2))\Rightarrow(r1_tarSKI X0 (k3_xboole_0 X1 X2)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarSKI (k3_xboole_0 X0 X1) X0 \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 X0))\Rightarrow(k9_subset_1 X0 X1 X2 = k3_xboole_0 X1 X2) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge(v4_relat_1 X1 X0))\Rightarrow(m1_subset_1 (k1_relset_1 X0 X1) (k1_zfmisc_1 X0)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.k3_xboole_0 X0 X1 = k3_xboole_0 X1 X0 \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((v4_relat_1 X2 X0)\wedge(v5_relat_1 X2 X1)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.(m2_subset_1 X0 k1_numbers k5_numbers)\Rightarrow(\forall X1. \\ & \forall X2.\forall X3.((v1_funct_1 X3)\wedge(m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 k1_numbers (k1_euclid X0))))))\Rightarrow(\forall X4.((v1_funct_1 \\ & X4)\wedge(m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers (k1_euclid \\ & X0))))))\Rightarrow(((r1_tarSKI X1 (k1_relset_1 k1_numbers X3))\wedge((r1_tarSKI \\ & X2 (k1_relset_1 k1_numbers X4))\wedge((v1_nfcont_4 (k2_partfun1 k1_numbers \\ & (k1_euclid X0) X3 X1) X0)\wedge(v1_nfcont_4 (k2_partfun1 k1_numbers \\ & (k1_euclid X0) X4 X2) X0))))\Rightarrow((v1_nfcont_4 (k2_partfun1 k1_numbers \\ & (k1_euclid X0) (k7_integr15 X0 k1_numbers X3 X4) (k3_xboole_0 X1 \\ & X2)) X0)\wedge(v1_nfcont_4 (k2_partfun1 k1_numbers (k1_euclid X0) \\ & (k8_integr15 X0 k1_numbers X3 X4) (k3_xboole_0 X1 X2)) X0)))) \end{aligned}$$