

t18_nfcont_3

(TMWkFvXZ1xauD1gj4KXf2ft1GkRvPYJn58A)

October 27, 2020

Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v2_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_rlvect_1 : \iota \Rightarrow o$ be given. Let $v4_rlvect_1 : \iota \Rightarrow o$ be given. Let $v5_rlvect_1 : \iota \Rightarrow o$ be given. Let $v6_rlvect_1 : \iota \Rightarrow o$ be given. Let $v7_rlvect_1 : \iota \Rightarrow o$ be given. Let $v8_rlvect_1 : \iota \Rightarrow o$ be given. Let $v3_normsp_0 : \iota \Rightarrow o$ be given. Let $v4_normsp_0 : \iota \Rightarrow o$ be given. Let $v2_normsp_1 : \iota \Rightarrow o$ be given. Let $l1_normsp_1 : \iota \Rightarrow o$ 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 $k1_numbers : \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_nfcont_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (v1_relat_1 X2) \Rightarrow ((r1_tarski X0 X1) \Rightarrow (k5_relat_1 (k5_relat_1 X2 X1) X0 = k5_relat_1 X2 X0)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \Rightarrow (k2_partfun1 X0 X1 X2 X3 = k5_relat_1 X2 X3) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge (v13_algstr_0 X0) \wedge ((v2_rlvect_1 X0) \wedge (v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v5_rlvect_1 X0) \wedge (v6_rlvect_1 X0) \wedge ((v7_rlvect_1 X0) \wedge (v8_rlvect_1 X0) \wedge ((v3_normsp_0 X0) \wedge ((v4_normsp_0 X0) \wedge ((v2_normsp_1 X0) \wedge (l1_normsp_1 X0)))))))))) \wedge ((v1_funct_1 X1) \wedge ((v1_nfcont_3 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers (u1_struct_0 X0))))))) \Rightarrow ((v1_funct_1 (k5_relat_1 X1 X2)) \wedge (v1_nfcont_3 (k5_relat_1 X1 X2) X0)) \quad (3)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((\neg v2_struct_0 X2)\wedge((v13_algstr_0 \\ & X2)\wedge((v2_rlvect_1 X2)\wedge((v3_rlvect_1 X2)\wedge((v4_rlvect_1 X2)\wedge \\ & ((v5_rlvect_1 X2)\wedge((v6_rlvect_1 X2)\wedge((v7_rlvect_1 X2)\wedge((v8_rlvect_1 \\ & X2)\wedge((v3_normsp_0 X2)\wedge((v4_normsp_0 X2)\wedge((v2_normsp_1 X2)\wedge \\ & (l1_normsp_1 X2))))))))))\Rightarrow(\forall X3.((v1_funct_1 X3)\wedge \\ & (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 k1_numbers (u1_struct_0 \\ & X2))))))\Rightarrow(((v1_nfcont_3 (k2_partfun1 k1_numbers (u1_struct_0 \\ & X2) X3 X0) X2)\wedge(r1_tarski X1 X0))\Rightarrow(v1_nfcont_3 (k2_partfun1 k1_numbers \\ & (u1_struct_0 X2) X3 X1) X2))) \end{aligned}$$