

t55_vfunct_1

(TMNk2iFYhesXtVw4fxbtFXpYbEUG1KHLYdn)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. 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 $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v3_funct_1 : \iota \Rightarrow o$ be given. Let $k2_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $r1_vfunct_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_vfunct_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_vfunct_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_comseq_2 : \iota \Rightarrow o$ be given. Let $k3_normsp_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. (\neg v1_xboole_0 X1) \Rightarrow (\forall X2. ((\neg v2_struct_0 \\
 & \quad X2) \wedge ((v13_algstr_0 X2) \wedge ((v2_rlvect_1 X2) \wedge ((v3_rlvect_1 X2) \wedge \\
 & ((v4_rlvect_1 X2) \wedge ((v5_rlvect_1 X2) \wedge ((v6_rlvect_1 X2) \wedge ((v7_rlvect_1 \\
 & \quad X2) \wedge ((v8_rlvect_1 X2) \wedge ((v3_normsp_0 X2) \wedge ((v4_normsp_0 X2) \wedge \\
 & \quad ((v2_normsp_1 X2) \wedge (l1_normsp_1 X2)))))))))) \Rightarrow (\forall X3. \\
 & ((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X1 \\
 & \quad (u1_struct_0 X2)))))) \Rightarrow ((v3_funct_1 (k2_partfun1 X1 (u1_struct_0 \\
 & \quad X2) X3 X0)) \Rightarrow (r1_vfunct_1 X1 X2 X3 X0)))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. (\neg v1_xboole_0 X1) \Rightarrow (\forall X2. ((\neg v2_struct_0 \\
 & \quad X2) \wedge ((v13_algstr_0 X2) \wedge ((v2_rlvect_1 X2) \wedge ((v3_rlvect_1 X2) \wedge \\
 & ((v4_rlvect_1 X2) \wedge ((v5_rlvect_1 X2) \wedge ((v6_rlvect_1 X2) \wedge ((v7_rlvect_1 \\
 & \quad X2) \wedge ((v8_rlvect_1 X2) \wedge ((v3_normsp_0 X2) \wedge ((v4_normsp_0 X2) \wedge \\
 & \quad ((v2_normsp_1 X2) \wedge (l1_normsp_1 X2)))))))))) \Rightarrow (\forall X3. \\
 & ((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X1 \\
 & \quad (u1_struct_0 X2)))))) \Rightarrow ((r1_vfunct_1 X1 X2 X3 X0) \Rightarrow ((v1_comseq_2 \\
 & \quad (k2_partfun1 X1 k1_numbers (k3_normsp_0 X1 X2 X3) X0)) \wedge (r1_vfunct_1 \\
 & \quad X1 X2 (k5_vfunct_1 X1 X2 X3) X0)))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. (\neg v1_xboole_0 X1) \Rightarrow (\forall X2. ((\neg v2_struct_0 \\
& X2) \wedge ((v13_algstr_0 X2) \wedge ((v2_rlvect_1 X2) \wedge ((v3_rlvect_1 X2) \wedge \\
& ((v4_rlvect_1 X2) \wedge ((v5_rlvect_1 X2) \wedge ((v6_rlvect_1 X2) \wedge ((v7_rlvect_1 \\
& X2) \wedge ((v8_rlvect_1 X2) \wedge ((v3_normsp_0 X2) \wedge ((v4_normsp_0 X2) \wedge \\
& ((v2_normsp_1 X2) \wedge (l1_normsp_1 X2)))))))))) \Rightarrow (\forall X3. \\
& ((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X1 \\
& (u1_struct_0 X2)))))) \Rightarrow (\forall X4. (m1_subset_1 X4 k1_numbers) \Rightarrow \\
& ((r1_vfunct_1 X1 X2 X3 X0) \Rightarrow (r1_vfunct_1 X1 X2 (k4_vfunct_1 X1 X2 \\
& X3 X4) X0))))))
\end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned}
& \forall X0. \forall X1. (\neg v1_xboole_0 X1) \Rightarrow (\forall X2. ((\neg v2_struct_0 \\
& X2) \wedge ((v13_algstr_0 X2) \wedge ((v2_rlvect_1 X2) \wedge ((v3_rlvect_1 X2) \wedge \\
& ((v4_rlvect_1 X2) \wedge ((v5_rlvect_1 X2) \wedge ((v6_rlvect_1 X2) \wedge ((v7_rlvect_1 \\
& X2) \wedge ((v8_rlvect_1 X2) \wedge ((v3_normsp_0 X2) \wedge ((v4_normsp_0 X2) \wedge \\
& ((v2_normsp_1 X2) \wedge (l1_normsp_1 X2)))))))))) \Rightarrow (\forall X3. \\
& ((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X1 \\
& (u1_struct_0 X2)))))) \Rightarrow ((v3_funct_1 (k2_partfun1 X1 (u1_struct_0 \\
& X2) X3 X0) \Rightarrow ((\forall X4. (m1_subset_1 X4 k1_numbers) \Rightarrow (r1_vfunct_1 \\
& X1 X2 (k4_vfunct_1 X1 X2 X3 X4) X0)) \wedge ((r1_vfunct_1 X1 X2 (k5_vfunct_1 \\
& X1 X2 X3) X0) \wedge (v1_comseq_2 (k2_partfun1 X1 k1_numbers (k3_normsp_0 \\
& X1 X2 X3) X0))))))
\end{aligned}$$