

l47_fvaluat1

(TMUiMF2E2CeWrfS3TE4dRgBMNVBNCRgTic4)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ 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 $v1_realset2 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $m1_fvaluat1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_fvaluat1 : \iota \Rightarrow o$ be given. Let $k1_fvaluat1 : \iota \Rightarrow \iota$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_numbers : \iota$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_fvaluat1 : \iota \Rightarrow o$ 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 $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v2_fvaluat1 : \iota \Rightarrow o$ 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 $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_membered : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((\neg v6_struct_0 X0) \wedge ((v13_algstr_0 \\ & X0) \wedge ((v3_group_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge \\ & (v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge ((v1_realset2 X0) \wedge (l6_algstr_0 \\ & X0)))))))))) \Rightarrow (\forall X1. (m1_fvaluat1 X1 X0) \Rightarrow ((v3_fvaluat1 \\ & X0) \Rightarrow (k1_xxreal_0 \in k2_relset_1 k7_numbers X1))) \end{aligned} \quad (1)$$

Assume the following.

$$v2_xxreal_0 k1_xxreal_0 \quad (2)$$

Assume the following.

$$v1_fvaluat1 k1_xxreal_0 \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l6_algstr_0 X0) \Rightarrow (\forall X1. (m1_fvaluat1 X1 X0) \Rightarrow \\ & ((v1_funct_1 X1) \wedge ((v1_funct_2 X1 (u1_struct_0 X0) k7_numbers) \wedge \\ & ((v2_fvaluat1 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 X0) k7_numbers))))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge(v5_relat_1 X1 X0))\Rightarrow(m1_subset_1 (k2_relset_1 X0 X1) (k1_zfmisc_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.(v2_membered X0)\Rightarrow((v2_xxreal_0 (k1_fvaluat1 X0))\wedge(v1_fvaluat1 (k1_fvaluat1 X0))) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(v2_membered X0)\Rightarrow((\exists X1.((v2_xxreal_0 X1)\wedge \\ (v1_fvaluat1 X1))\wedge(X1 \in X0))\Rightarrow(\forall X1.((v2_xxreal_0 X1)\wedge \\ v1_fvaluat1 X1))\Rightarrow((X1 = k1_fvaluat1 X0)\Leftrightarrow((X1 \in X0)\wedge(\forall X2. \\ ((v2_xxreal_0 X2)\wedge(v1_fvaluat1 X2))\Rightarrow((X2 \in X0)\Rightarrow(r1_xxreal_0 \\ X1 X2)))))) \quad (7) \end{aligned}$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 (k1_zfmisc_1 k7_numbers))\Rightarrow(v2_membered X0) \quad (8)$$

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

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0)\wedge((\neg v6_struct_0 X0)\wedge((v13_algstr_0 \\ X0)\wedge((v3_group_1 X0)\wedge((v5_vectsp_1 X0)\wedge((v2_rlvect_1 X0)\wedge \\ (v3_rlvect_1 X0)\wedge((v4_rlvect_1 X0)\wedge((v1_realset2 X0)\wedge(l6_algstr_0 \\ X0))))))))))\Rightarrow(\forall X1.(m1_fvaluat1 X1 X0)\Rightarrow((v3_fvaluat1 \\ X0)\Rightarrow(k1_fvaluat1 (k2_relset_1 k7_numbers X1) \in k2_relset_1 k7_numbers \\ X1))) \end{aligned}$$