

t16_vectsp_6
(TMYeFCVeCDE3eRqrqvMy1gB35NEituG6tuQ)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v4_vectsp_1 : \iota \Rightarrow o$ 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 $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $v8_vectsp_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v9_vectsp_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v10_vectsp_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v11_vectsp_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1_vectsp_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_vectsp_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_subset_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k4_vectsp_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_vectsp_6 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l2_struct_0 : \iota \Rightarrow o$ be given. Let $m1_vectsp_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $l5_algstr_0 : \iota \Rightarrow o$ be given. Let $l1_algstr_0 : \iota \Rightarrow o$ be given. Let $k1_vectsp_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v13_algstr_0 X0) \wedge ((v3_group_1 \\ & X0) \wedge ((v4_vectsp_1 X0) \wedge ((v5_vectsp_1 X0) \wedge ((v2_rlvect_1 X0) \wedge \\ & ((v3_rlvect_1 X0) \wedge ((v4_rlvect_1 X0) \wedge (l6_algstr_0 X0)))))))))) \Rightarrow \\ & (\forall X1.((\neg v2_struct_0 X1) \wedge ((v13_algstr_0 X1) \wedge ((v8_vectsp_1 \\ & X1 X0) \wedge ((v9_vectsp_1 X1 X0) \wedge ((v10_vectsp_1 X1 X0) \wedge ((v11_vectsp_1 \\ & X1 X0) \wedge ((v2_rlvect_1 X1) \wedge ((v3_rlvect_1 X1) \wedge ((v4_rlvect_1 X1) \wedge \\ & (l1_vectsp_1 X1 X0)))))))))) \Rightarrow (k4_vectsp_6 X0 X1 (k2_vectsp_6 \\ & X0 X1) = k4_struct_0 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.v1_xboole_0 (k1_subset_1 X0) \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0)\wedge(l2_struct_0 \\ X0))\wedge(((\neg v2_struct_0 X1)\wedge(l1_vectsp_1 X1 X0))\wedge(m1_subset_1 \\ X2 (k1_zfmisc_1 (u1_struct_0 X1))))))\Rightarrow(\forall X3.(m2_vectsp_6 \\ X3 X0 X1 X2)\Rightarrow(m1_vectsp_6 X3 X0 X1)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(l6_algstr_0 X0)\Rightarrow((l2_algstr_0 X0)\wedge(l5_algstr_0 X0)) \quad (6)$$

Assume the following.

$$\forall X0.(l2_algstr_0 X0)\Rightarrow((l2_struct_0 X0)\wedge(l1_algstr_0 X0)) \quad (7)$$

Assume the following.

$$\forall X0.m1_subset_1 (k1_subset_1 X0) (k1_zfmisc_1 X0) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0)\wedge(l2_struct_0 X0))\Rightarrow(\forall X1. \\ ((\neg v2_struct_0 X1)\wedge(l1_vectsp_1 X1 X0))\Rightarrow(\forall X2.(m1_subset_1 \\ X2 (k1_zfmisc_1 (u1_struct_0 X1))))\Rightarrow(\forall X3.(m1_vectsp_6 \\ X3 X0 X1)\Rightarrow((m2_vectsp_6 X3 X0 X1 X2)\Leftrightarrow(r1_tarski (k1_vectsp_6 X0 \\ X1 X3) X2)))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2_struct_0 X0)\wedge(l2_struct_0 X0))\Rightarrow(\forall X1. \\ ((\neg v2_struct_0 X1)\wedge(l1_vectsp_1 X1 X0))\Rightarrow(\forall X2.(m1_vectsp_6 \\ X2 X0 X1)\Rightarrow((X2 = k2_vectsp_6 X0 X1)\Leftrightarrow(k1_vectsp_6 X0 X1 X2 = k1_xboole_0)))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0))\Rightarrow(v1_xboole_0 X1)) \quad (11)$$

Theorem 1

$$\begin{aligned} \forall X0.(((\neg v2_struct_0 X0)\wedge((v13_algstr_0 X0)\wedge((v3_group_1 \\ X0)\wedge((v4_vectsp_1 X0)\wedge((v5_vectsp_1 X0)\wedge((v2_rlvect_1 X0)\wedge \\ ((v3_rlvect_1 X0)\wedge((v4_rlvect_1 X0)\wedge(l6_algstr_0 X0))))))))))\Rightarrow \\ (\forall X1.(((\neg v2_struct_0 X1)\wedge((v13_algstr_0 X1)\wedge((v8_vectsp_1 \\ X1 X0)\wedge((v9_vectsp_1 X1 X0)\wedge((v10_vectsp_1 X1 X0)\wedge((v11_vectsp_1 \\ X1 X0)\wedge((v2_rlvect_1 X1)\wedge((v3_rlvect_1 X1)\wedge((v4_rlvect_1 X1)\wedge \\ (l1_vectsp_1 X1 X0))))))))))\Rightarrow(\forall X2.(m2_vectsp_6 X2 X0 X1 \\ (k1_subset_1 (u1_struct_0 X1))\Rightarrow(k4_vectsp_6 X0 X1 X2 = k4_struct_0 \\ X1)))) \end{aligned}$$