

l34.ec_pf_1

(TMUz71CFcwvoCqX3HkyaxADoyD5fPQJYaBk)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_int_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k9_int_3 : \iota \Rightarrow \iota$ be given. Let $k8_group_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_binom : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_group_1 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $k6_algstr_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_group_1 : \iota \Rightarrow o$ be given. Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v33_algstr_0 : \iota \Rightarrow o$ 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 $v4_vectsp_1 : \iota \Rightarrow o$ be given. Let $v5_vectsp_1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v36_algstr_0 : \iota \Rightarrow o$ be given. Let $l6_algstr_0 : \iota \Rightarrow o$ be given. Let $l2_algstr_0 : \iota \Rightarrow o$ be given. Let $l5_algstr_0 : \iota \Rightarrow o$ be given. Let $l4_algstr_0 : \iota \Rightarrow o$ be given. Let $l4_struct_0 : \iota \Rightarrow o$ be given. Let $l3_struct_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v1_group_1 X0) \wedge ((v3_group_1 \\ & X0) \wedge (l3_algstr_0 X0)))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X2.(v7_ordinal1 X2) \Rightarrow (\forall X3.(v7_ordinal1 \\ & X3) \Rightarrow (k2_binom X0 X1 (k2_xcmplx_0 X2 X3) = k6_algstr_0 X0 (k2_binom \\ & X0 X1 X2) (k2_binom X0 X1 X3)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0) \wedge ((v5_group_1 \\ & X0) \wedge (l3_algstr_0 X0))) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge \\ & m1_subset_1 X2 (u1_struct_0 X0)))) \Rightarrow (k8_group_1 X0 X1 X2 = k6_algstr_0 \\ & X0 X1 X2) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.((v7_ordinal1\ X0)\wedge(v1_int_2\ X0))\Rightarrow((\neg v6_struct_0 \\ (k9_int_3\ X0))\wedge((v13_algstr_0\ (k9_int_3\ X0))\wedge((v33_algstr_0 \\ (k9_int_3\ X0))\wedge((v3_group_1\ (k9_int_3\ X0))\wedge((v5_group_1\ (k9_int_3 \\ X0))\wedge((v2_rlvect_1\ (k9_int_3\ X0))\wedge((v3_rlvect_1\ (k9_int_3\ X0))\wedge \\ ((v4_rlvect_1\ (k9_int_3\ X0))\wedge((v4_vectsp_1\ (k9_int_3\ X0))\wedge(\\ v5_vectsp_1\ (k9_int_3\ X0)))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0\ X0)\wedge(v7_ordinal1\ X0))\Rightarrow((\neg v2_struct_0 \\ (k9_int_3\ X0))\wedge(v36_algstr_0\ (k9_int_3\ X0))) \quad (4)$$

Assume the following.

$$\forall X0.(l6_algstr_0\ X0)\Rightarrow((l2_algstr_0\ X0)\wedge(l5_algstr_0\ X0)) \quad (5)$$

Assume the following.

$$\forall X0.(l5_algstr_0\ X0)\Rightarrow((l4_algstr_0\ X0)\wedge(l4_struct_0\ X0)) \quad (6)$$

Assume the following.

$$\forall X0.(l4_algstr_0\ X0)\Rightarrow((l3_struct_0\ X0)\wedge(l3_algstr_0\ X0)) \quad (7)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(l6_algstr_0\ (k9_int_3\ X0)) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.(((\neg v2_struct_0\ X0)\wedge((v1_group_1 \\ X0)\wedge(l3_algstr_0\ X0)))\wedge((m1_subset_1\ X1\ (u1_struct_0\ X0))\wedge(\\ v7_ordinal1\ X2)))\Rightarrow(m1_subset_1\ (k2_binom\ X0\ X1\ X2)\ (u1_struct_0 \\ X0)) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.(l4_algstr_0\ X0)\Rightarrow(((\neg v2_struct_0\ X0)\wedge(v4_vectsp_1 \\ X0))\Rightarrow((\neg v2_struct_0\ X0)\wedge(v1_group_1\ X0))) \quad (10)$$

Assume the following.

$$\forall X0.((v7_ordinal1\ X0)\wedge(v1_int_2\ X0))\Rightarrow((\neg v1_xboole_0 \\ X0)\wedge((v7_ordinal1\ X0)\wedge(v1_int_2\ X0))) \quad (11)$$

Theorem 1

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0)\Rightarrow(\forall X1.(v7_ordinal1\ X1)\Rightarrow(\forall X2. \\ ((v7_ordinal1\ X2)\wedge(v1_int_2\ X2))\Rightarrow(\forall X3.(m1_subset_1\ X3 \\ (u1_struct_0\ (k9_int_3\ X2)))\Rightarrow(k8_group_1\ (k9_int_3\ X2)\ (k2_binom \\ (k9_int_3\ X2)\ X3\ X0)\ (k2_binom\ (k9_int_3\ X2)\ X3\ X1) = k2_binom\ (k9_int_3 \\ X2)\ X3\ (k2_xcmplx_0\ X0\ X1)))))) \end{aligned}$$