

t21_ec_pf_1

(TMZVbYL4hbbN65WjZzrnzo37x7WvGHPzZxL)

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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 $k2_binom : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_group_1 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_group_1 : \iota \Rightarrow o$ be given. Let $l3_algstr_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_struct_0 : \iota \Rightarrow \iota$ be given. Let $v4_vectsp_1 : \iota \Rightarrow o$ be given. Let $l4_algstr_0 : \iota \Rightarrow o$ be given. Let $v6_struct_0 : \iota \Rightarrow o$ be given. Let $v13_algstr_0 : \iota \Rightarrow o$ be given. Let $v33_algstr_0 : \iota \Rightarrow o$ be given. Let $v3_group_1 : \iota \Rightarrow o$ be given. Let $v5_group_1 : \iota \Rightarrow o$ 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 $v5_vectsp_1 : \iota \Rightarrow o$ 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 $l4_struct_0 : \iota \Rightarrow o$ be given. Let $l3_struct_0 : \iota \Rightarrow o$ be given. Let $r1_int_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v1_group_1 X0) \wedge (l3_algstr_0 \\ & X0))) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow ((k2_binom \\ & X0 X1 k6_numbers = k1_group_1 X0) \wedge (k2_binom X0 X1 np_1 = X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. (v7_ordinal1 X0) \Rightarrow ((\neg r1_xxreal_0 X0 np_1) \Rightarrow (k5_struct_0 (k9_int_3 X0) = np_1)) \quad (2)$$

Assume the following.

$$\forall X0. ((\neg v2_struct_0 X0) \wedge ((v4_vectsp_1 X0) \wedge (l4_algstr_0 X0))) \Rightarrow (k1_group_1 X0 = k5_struct_0 X0) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((v7_ordinal1\ X0)\wedge(v1_int_2\ X0))\Rightarrow((\neg v6_struct_0 \\ (k9_int_3\ X0))\wedge((v13_algstr_0\ (k9_int_3\ X0))\wedge((v33_algstr_0 \\ (k9_int_3\ X0))\wedge((v3_group_1\ (k9_int_3\ X0))\wedge((v5_group_1\ (k9_int_3 \\ X0))\wedge((v2_rlvect_1\ (k9_int_3\ X0))\wedge((v3_rlvect_1\ (k9_int_3\ X0))\wedge \\ ((v4_rlvect_1\ (k9_int_3\ X0))\wedge((v4_vectsp_1\ (k9_int_3\ X0))\wedge(\\ v5_vectsp_1\ (k9_int_3\ X0))))))))))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0\ X0)\wedge(v7_ordinal1\ X0))\Rightarrow((\neg v2_struct_0 \\ (k9_int_3\ X0))\wedge(v36_algstr_0\ (k9_int_3\ X0))) \quad (5)$$

Assume the following.

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

Assume the following.

$$\forall X0.(l5_algstr_0\ X0)\Rightarrow((l4_algstr_0\ X0)\wedge(l4_struct_0\ X0)) \quad (7)$$

Assume the following.

$$\forall X0.(l4_algstr_0\ X0)\Rightarrow((l3_struct_0\ X0)\wedge(l3_algstr_0\ X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v7_ordinal1\ X0)\Rightarrow(l6_algstr_0\ (k9_int_3\ X0)) \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.(v7_ordinal1\ X0)\Rightarrow((v1_int_2\ X0)\Leftrightarrow((\neg r1_xreal_0\ X0 \\ np_1)\wedge(\forall X1.(v7_ordinal1\ X1)\Rightarrow(\neg(r1_int_1\ X1\ X0)\wedge((X1\neq \\ np_1)\wedge(X1\neq X0)))))) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.(l4_algstr_0\ X0)\Rightarrow(((\neg v2_struct_0\ X0)\wedge(v4_vectsp_1 \\ X0))\Rightarrow((\neg v2_struct_0\ X0)\wedge(v1_group_1\ X0))) \quad (11)$$

Assume the following.

$$\forall X0.((v7_ordinal1\ X0)\wedge(v1_int_2\ X0))\Rightarrow((\neg v1_xboole_0 \\ X0)\wedge((v7_ordinal1\ X0)\wedge(v1_int_2\ X0))) \quad (12)$$

Theorem 1

$$\begin{aligned} \forall X0.((v7_ordinal1\ X0)\wedge(v1_int_2\ X0))\Rightarrow(\forall X1.(m1_subset_1 \\ X1\ (u1_struct_0\ (k9_int_3\ X0)))\Rightarrow((k2_binom\ (k9_int_3\ X0)\ X1\ k6_numbers = \\ k1_group_1\ (k9_int_3\ X0))\wedge(k2_binom\ (k9_int_3\ X0)\ X1\ k6_numbers = \\ np_1))) \end{aligned}$$