

t59_card_2

(TMMiXBophzdvacUMRbWu9rqbeaSGt3sVhwe)

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Let $k5_card_1 : \iota \Rightarrow \iota$ be given. Let $k2_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_4 : \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $np_3 : \iota$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.k2_enumset1\ X0\ X1\ X2\ X3 = k2_xboole_0\ (k1_enumset1\ X0\ X1\ X2)\ (k1_tarski\ X3) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\neg(X0 \neq X1) \wedge ((X0 \neq X2) \wedge ((X1 \neq X2) \wedge (k5_card_1\ (k1_enumset1\ X0\ X1\ X2) \neq np_3))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(v1_finset_1\ X1) \Rightarrow ((\neg X0 \in X1) \Rightarrow (k5_card_1\ (k2_xboole_0\ X1\ (k1_tarski\ X0)) = k2_nat_1\ (k5_card_1\ X1)\ np_1)) \quad (3)$$

Assume the following.

$$((v2_xxreal_0\ np_3) \wedge (m2_subset_1\ np_3\ k1_numbers\ k5_numbers)) \wedge ((m1_subset_1\ np_3\ k5_numbers) \wedge (m1_subset_1\ np_3\ k1_numbers)) \quad (4)$$

Assume the following.

$$((v2_xxreal_0\ np_1) \wedge (m2_subset_1\ np_1\ k1_numbers\ k5_numbers)) \wedge ((m1_subset_1\ np_1\ k5_numbers) \wedge (m1_subset_1\ np_1\ k1_numbers)) \quad (5)$$

Assume the following.

$$k2_xcmplx_0\ np_3\ np_1 = np_4 \quad (6)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((m1_subset_1 X0 k5_numbers)\wedge(v7_ordinal1 X1))\Rightarrow(k2_nat_1 X0 X1 = k2_xcmplx_0 X0 X1) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.v1_finset_1 (k1_enumset1 X0 X1 X2) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(X3 = k1_enumset1 X0 X1 X2)\Leftrightarrow(\forall X4.(X4 \in X3)\Leftrightarrow(\neg(X4 \neq X0)\wedge((X4 \neq X1)\wedge(X4 \neq X2)))) \quad (10)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k4_ordinal1)\Rightarrow(v7_ordinal1 X0) \quad (11)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.\forall X3.\neg(X0 \neq X1)\wedge((X0 \neq X2)\wedge((X0 \neq X3)\wedge((X1 \neq X2)\wedge((X1 \neq X3)\wedge((X2 \neq X3)\wedge(k5_card_1 (k2_enumset1 X0 X1 X2 X3) \neq np_4))))))$$