

t4\_card\_lar (TM-  
LVPQ7S8PCgHdPeSbTSUZSNYRjGjn6p5Ee)

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Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v4\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_card\_lar : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_ordinal2 : \iota \Rightarrow \iota$  be given. Let  $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_ordinal1 : \iota \Rightarrow o$  be given. Let  $r2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. ((v3\_ordinal1 X0) \wedge ((v4\_ordinal1 X0) \wedge (\neg v1\_finset\_1 X0))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (r1\_tarski X1 (k3\_ordinal2 X1))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Rightarrow (r1\_ordinal1 (k3\_ordinal2 X0) (k3\_ordinal2 X1)) \quad (3)$$

Assume the following.

$$\forall X0. (v3\_ordinal1 X0) \Rightarrow (k3\_ordinal2 X0 = X0) \quad (4)$$

Assume the following.

$$\forall X0. (v1\_ordinal1 X0) \Rightarrow (\forall X1. (v3\_ordinal1 X1) \Rightarrow ((r2\_xboole\_0 X0 X1) \Rightarrow (X0 \in X1))) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. ((v3\_ordinal1 X0) \wedge (v3\_ordinal1 X1)) \Rightarrow ((r1\_ordinal1 X0 X1) \Leftrightarrow (r1\_tarski X0 X1)) \quad (6)$$

Assume the following.

$$\forall X0. v3\_ordinal1 (k3\_ordinal2 X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.(r2\_xboole\_0 X0 X1)\Leftrightarrow((r1\_tarski X0 X1)\wedge (X0\neq X1)) \quad (8)$$

Assume the following.

$$\forall X0.((v3\_ordinal1 X0)\wedge((v4\_ordinal1 X0)\wedge(\neg v1\_finset\_1 X0)))\Rightarrow(\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0))\Rightarrow((v1\_card\_lar X1 X0)\Leftrightarrow(k3\_ordinal2 X1 = X0))) \quad (9)$$

Assume the following.

$$\forall X0.(v3\_ordinal1 X0)\Rightarrow((v1\_ordinal1 X0)\wedge(v2\_ordinal1 X0)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1)\Rightarrow(\neg X1 \in X0) \quad (11)$$

**Theorem 1**

$$\forall X0.((v3\_ordinal1 X0)\wedge((v4\_ordinal1 X0)\wedge(\neg v1\_finset\_1 X0)))\Rightarrow(\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0))\Rightarrow((\neg(\neg v1\_card\_lar X1 X0)\wedge(\forall X2.(v3\_ordinal1 X2)\Rightarrow(\neg(X2 \in X0)\wedge(r1\_tarski X1 X2))))\wedge(\neg(\exists X2.(v3\_ordinal1 X2)\wedge((X2 \in X0)\wedge(r1\_tarski X1 X2))))\wedge(v1\_card\_lar X1 X0))))$$