# t17_card_lar (TMNSmy9wkG2dPfWeLEb851majCPZ9gEaqjj)

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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 $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_card\_lar : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_ordinal1 : \iota \Rightarrow \iota$ be given. Let $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1) \Rightarrow (k3\_xboole\_0\ X0\ X1 = X0) \tag{2}$$

Assume the following.

$$\forall X0.((v3\_ordinal1\ X0) \wedge ((v4\_ordinal1\ X0) \wedge (\neg v1\_finset\_1\ X0))) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow (\forall X2.(v3\_ordinal1\ X2) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ X0)) \Rightarrow ((r1\_tarski\ (k8\_subset\_1\ X0\ X3\ X1)\ X2) \Rightarrow (r1\_tarski\ (k9\_subset\_1\ X0\ X1\ (k2\_card\_lar\ X0\ X3))\ (k1\_ordinal1\ X2))))))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0)) \Rightarrow (k9\_subset\_1\ X0\ X1\ X2 = k3\_xboole\_0\ X1\ X2) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \Rightarrow (k8\_subset\_1\ X0\ X1\ X2 = k3\_xboole\_0\ X1\ X2) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(((v3\_ordinal1\ X0) \wedge ((v4\_ordinal1\ X0) \wedge (\neg v1\_finset\_1\ X0))) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))) \Rightarrow (m1\_subset\_1\ (k2\_card\_lar\ X0\ X1)\ (k1\_zfmisc\_1\ X0)) \tag{6}$$

Assume the following.

$$\forall X0.k1\_ordinal1\ X0 = k2\_xboole\_0\ X0\ (k1\_tarski\ X0) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.k3\_xboole\_0\ X0\ X1 = k3\_xboole\_0\ X1\ X0 \tag{8}$$

**Theorem 1**

$$\forall X0.((v3\_ordinal1\ X0)\wedge((v4\_ordinal1\ X0)\wedge(\neg v1\_finset\_1\ X0)))\Rightarrow(\forall X1.(v3\_ordinal1\ X1)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0))\Rightarrow((r1\_tarski\ X2\ X1)\Rightarrow(r1\_tarski\ (k2\_card\_lar\ X0\ X2)\ (k1\_ordinal1\ X1)))))$$