t16_card_lar (TMFXhbZd7ayxF8enyP8ebxYmoVTuoTR4yDz)

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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 $k8\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_card\_lar : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_ordinal1 : \iota \Rightarrow \iota$ be given. Let $v1\_card\_lar : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_ordinal1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k3\_ordinal2 : \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v3\_ordinal1\ X0) \wedge ((v4\_ordinal1\ X0) \wedge (\neg v1\_finset\_1\ X0))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \Rightarrow ((v1\_card\_lar\ X1\ X0) \Leftrightarrow (\forall X2.(v3\_ordinal1\ X2) \Rightarrow (\neg(X2 \in X0) \wedge (\forall X3.(v3\_ordinal1\ X3) \Rightarrow (\neg(X3 \in X1) \wedge (r1\_ordinal1\ X2\ X3))))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ X1)) \Leftrightarrow (r1\_tarski\ X0\ X1) \tag{2}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (r1\_ordinal1\ (k1\_ordinal1\ X0)\ X1))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ (k3\_xboole\_0\ X0\ X1)\ X0 \tag{4}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow ((r1\_ordinal1\ X0\ X1) \vee (X1 \in X0))) \tag{5}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0))\Rightarrow(k9\_subset\_1\ X0\ X1\ X2 = k3\_xboole\_0\ X1\ X2) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(k8\_subset\_1\ X0\ X1\ X2 = k3\_xboole\_0\ X1\ X2) \tag{8}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0)\Rightarrow((\neg v1\_xboole\_0\ (k1\_ordinal1\ X0))\wedge(v3\_ordinal1\ (k1\_ordinal1\ X0))) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(((v3\_ordinal1\ X0)\wedge((v4\_ordinal1\ X0)\wedge(\neg v1\_finset\_1\ X0)))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)))\Rightarrow(m1\_subset\_1\ (k2\_card\_lar\ X0\ X1)\ (k1\_zfmisc\_1\ X0)) \tag{10}$$

Assume the following.

$$\forall X0.((v3\_ordinal1\ X0)\wedge((v4\_ordinal1\ X0)\wedge(\neg v1\_finset\_1\ X0)))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(k2\_card\_lar\ X0\ X1 = ReplSep\ (toset\ (\lambda X2 : \iota.m1\_subset\_1\ X2\ X0))\ (\lambda X2 : \iota.(\neg v1\_finset\_1\ X2)\wedge((v4\_ordinal1\ X2)\wedge(k3\_ordinal2\ (k8\_subset\_1\ X0\ X1\ X2) = X2)))\ (\lambda X2 : \iota.X2))) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k3\_xboole\_0\ X0\ X1)\Leftrightarrow(\forall X3.(X3 \in X2)\Leftrightarrow((X3 \in X0)\wedge(X3 \in X1))) \tag{12}$$

Assume the following.

$$\forall X0.((v3\_ordinal1\ X0)\wedge((v4\_ordinal1\ X0)\wedge(\neg v1\_finset\_1\ X0)))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow((v1\_card\_lar\ X1\ X0)\Leftrightarrow(k3\_ordinal2\ X1 = X0))) \tag{13}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1)\Leftrightarrow(\forall X2.(X2 \in X0)\Rightarrow(X2 \in X1)) \tag{14}$$

Assume the following.

$$\forall X0.k1\_ordinal1\ X0 = k2\_xboole\_0\ X0\ (k1\_tarski\ X0) \tag{15}$$

Assume the following.

$$\forall X0.\forall X1.k3\_xboole\_0\ X0\ X1 = k3\_xboole\_0\ X1\ X0 \tag{16}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (v3\_ordinal1\ X1)) \tag{17}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (\neg X1 \in X0) \tag{18}$$

Theorem 1

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