

t27_card_2 (TMHPgKRRKpVAjRzL- gvJG4WMTxg82827mACoG)

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Let $v1_card_1 : \iota \Rightarrow o$ be given. Let $k3_card_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k9_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_wellord2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_card_1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. k9_funct_2 X0 (k1_tarski X1) = k6_domain_1 \\ (k1_zfmisc_1 (k2_zfmisc_1 X0 (k1_tarski X1))) (k7_funcop_1 X0 X1) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (r2_wellord2 X0 (k1_funct_2 (k1_tarski \\ X1) X0)) \wedge (k1_card_1 X0 = k1_card_1 (k1_funct_2 (k1_tarski X1) X0)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. k1_card_1 (k1_tarski X0) = np_1 \quad (3)$$

Assume the following.

$$np_1 = k1_tarski k1_xboole_0 \quad (4)$$

Assume the following.

$$\neg v1_xboole_0 np_1 \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. r2_wellord2 X0 X0 \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (\neg v1_xboole_0 X1) \Rightarrow (k9_funct_2 X0 X1 = k1_funct_2 X0 X1) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0 X0)\wedge(m1_subset_1 X1 X0))\Rightarrow (k6_domain_1 X0 X1 = k1_tarski X1) \quad (8)$$

Assume the following.

$$\forall X0.\neg v1_xboole_0 (k1_zfmisc_1 X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(v1_funct_1 (k7_funcop_1 X0 X1))\wedge((v1_funct_2 (k7_funcop_1 X0 X1) X0 (k1_tarski X1))\wedge(m1_subset_1 (k7_funcop_1 X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 X0 (k1_tarski X1)))))) \quad (10)$$

Assume the following.

$$\forall X0.v1_card_1 (k1_card_1 X0) \quad (11)$$

Assume the following.

$$\forall X0.(v1_card_1 X0)\Rightarrow(\forall X1.(v1_card_1 X1)\Rightarrow(k3_card_2 X0 X1 = k1_card_1 (k1_funct_2 X1 X0))) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(v1_card_1 X1)\Rightarrow((X1 = k1_card_1 X0)\Leftrightarrow(r2_wellord2 X0 X1)) \quad (13)$$

Theorem 1

$$\forall X0.(v1_card_1 X0)\Rightarrow((k3_card_2 X0 np_1 = X0)\wedge(k3_card_2 np_1 X0 = np_1))$$