

t83_funct_7

(TMdGUi6T2XdodqSMX5fSshFBGFw7qoMxd9h)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v1_funct.1 : \iota \Rightarrow o$ be given. Let $v1_funct.2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc.1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_funct.7 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat.1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple.0 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple.0 : \iota \Rightarrow \iota$ be given. Let $k1_relset.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5_relat.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_relset.1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4_relat.1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_relat.1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow ((r1_tarski \\ (k10_xtuple.0 X0) (k9_xtuple.0 X0)) \Rightarrow ((k9_xtuple.0 (k9_funct.7 \\ X0 X1) = k9_xtuple.0 X0) \wedge (r1_tarski (k10_xtuple.0 (k9_funct.7 \\ X0 X1)) (k9_xtuple.0 X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1_funct.1 X1) \wedge ((v1_funct.2 X1 X0 X0) \wedge \\ (m1_subset.1 X1 (k1_zfmisc.1 (k2_zfmisc.1 X0 X0)))))) \Rightarrow (k1_relset.1 \\ X0 X1 = X0) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset.1 X0 (k1_zfmisc.1 X1)) \Leftrightarrow (r1_tarski \\ X0 X1) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1_relat.1 X1) \wedge (v1_funct.1 X1)) \Rightarrow ((r1_tarski \\ (k10_xtuple.0 X1) X0) \Rightarrow ((v1_funct.1 X1) \wedge ((v1_funct.2 X1 (k9_xtuple.0 \\ X1) X0) \wedge (m1_subset.1 X1 (k1_zfmisc.1 (k2_zfmisc.1 (k9_xtuple.0 \\ X1) X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat.1 X1) \wedge (v5_relat.1 X1 X0)) \Rightarrow (\\ k2_relset.1 X0 X1 = k10_xtuple.0 X1) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge(v4_relat_1 X1 X0))\Rightarrow(k1_relset_1 X0 X1 = k9_xtuple_0 X1) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(((v1_relat_1 X0)\wedge(v1_funct_1 X0))\wedge(v7_ordinal1 X1))\Rightarrow((v1_relat_1 (k9_funct_7 X0 X1))\wedge(v1_funct_1 (k9_funct_7 X0 X1))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0)\wedge(v7_ordinal1 X1))\Rightarrow(v1_relat_1 (k9_funct_7 X0 X1)) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1)\wedge(v5_relat_1 X1 X0))\Rightarrow(m1_subset_1 (k2_relset_1 X0 X1) (k1_zfmisc_1 X0)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((v4_relat_1 X2 X0)\wedge(v5_relat_1 X2 X1)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (11)$$

Theorem 1

$$\forall X0.\forall X1.(v7_ordinal1 X1)\Rightarrow(\forall X2.(((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 X0)\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0))))))\Rightarrow((v1_funct_1 (k9_funct_7 X2 X1))\wedge((v1_funct_2 (k9_funct_7 X2 X1) X0 X0)\wedge(m1_subset_1 (k9_funct_7 X2 X1) (k1_zfmisc_1 (k2_zfmisc_1 X0 X0))))))$$