

t4_mesfunc2
(TMQ648ssqPpoXd7VngQvuGkxiEW1ezEuRyS)

October 27, 2020

Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k3_numbers : \iota$ 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 $v2_funct_1 : \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_tarski : \iota \Rightarrow \iota \Rightarrow o$ 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 $r2_wellord2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$r2_tarski \ k5_numbers \ k3_numbers \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((v1_relat_1 \ X1) \wedge (v1_funct_1 \ X1)) \Rightarrow ((r1_tarski \\ (k10_xtuple_0 \ X1) \ X0) \Rightarrow ((v1_funct_1 \ X1) \wedge ((v1_funct_2 \ X1 \ (k9_xtuple_0 \\ X1) \ X0) \wedge (m1_subset_1 \ X1 \ (k1_zfmisc_1 \ (k2_zfmisc_1 \ (k9_xtuple_0 \\ X1) \ X0)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski \ X0 \ X0 \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. (r2_wellord2 \ X0 \ X1) \Leftrightarrow (r2_tarski \ X0 \ X1) \tag{4}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 \ X1) \wedge (v5_relat_1 \ X1 \ X0)) \Rightarrow (\\ k2_relset_1 \ X0 \ X1 = k10_xtuple_0 \ X1) \tag{5}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(r2_wellord2\ X0\ X1)\Leftrightarrow(\exists X2.((v1_relat_1\ X2)\wedge(v1_funct_1\ X2))\wedge((v2_funct_1\ X2)\wedge((k9_xtuple_0\ X2 = X0)\wedge(k10_xtuple_0\ X2 = X1)))) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))\Rightarrow((v4_relat_1\ X2\ X0)\wedge(v5_relat_1\ X2\ X1)) \quad (8)$$

Theorem 1

$$\begin{aligned} & \exists X0.((v1_funct_1\ X0)\wedge((v1_funct_2\ X0\ k5_numbers\ k3_numbers)\wedge \\ & (m1_subset_1\ X0\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ k3_numbers))))))\wedge \\ & ((v2_funct_1\ X0)\wedge((k1_relset_1\ k5_numbers\ X0 = k5_numbers)\wedge(\\ & k2_relset_1\ k3_numbers\ X0 = k3_numbers))) \end{aligned}$$