

t79_mesfunc6

(TMGb4gjVfq4LRhTg7AZycNRVALbuZrJFqm)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_prob_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_prob_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $k1_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $v2_finsub_1 : \iota \Rightarrow o$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_measure1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_finsub_1 : \iota \Rightarrow o$ be given. Let $v3_valued_0 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. ((v3_membered \\ & X1) \wedge ((v3_membered X2) \wedge (((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))) \wedge ((v1_funct_1 X4) \wedge (m1_subset_1 X4 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X2)))))) \Rightarrow (k3_valued_1 X0 X1 X2 X3 X4 = k1_valued_1 \\ & X3 X4) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v4_relat_1 X1 X0)) \Rightarrow (k1_relset_1 X0 X1 = k9_xtuple_0 X1) \tag{2}$$

Assume the following.

$$v3_membered k1_numbers \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.\forall X4.((v3_membered \\ & X1)\wedge((v3_membered X2)\wedge(((v1_funct_1 X3)\wedge(m1_subset_1 X3 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))))\wedge((v1_funct_1 X4)\wedge(m1_subset_1 X4 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X2))))))\Rightarrow((v1_funct_1 (k3_valued_1 X0 X1 X2 X3 \\ & X4)\wedge(m1_subset_1 (k3_valued_1 X0 X1 X2 X3 X4) (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 k1_numbers)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_valued_0 \\ & X0)))\wedge((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_valued_0 X1))))\Rightarrow \\ & ((v1_relat_1 (k1_valued_1 X0 X1))\wedge(v1_funct_1 (k1_valued_1 X0 \\ & X1))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v2_finsub_1 X0)\Leftrightarrow(\forall X1.\forall X2.((X1 \in X0)\wedge \\ & (X2 \in X0))\Rightarrow(k3_xboole_0 X1 X2 \in X0)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.(((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_valued_0 X0)))\Rightarrow \\ & (\forall X1.(((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_valued_0 \\ & X1))))\Rightarrow(\forall X2.(((v1_relat_1 X2)\wedge(v1_funct_1 X2))\Rightarrow((X2 = k1_valued_1 \\ & X0 X1)\Leftrightarrow(((k9_xtuple_0 X2 = k3_xboole_0 (k9_xtuple_0 X0) (k9_xtuple_0 \\ & X1))\wedge(\forall X3.(X3 \in k9_xtuple_0 X2)\Rightarrow(k1_funct_1 X2 X3 = k2_xcmplx_0 \\ & (k1_funct_1 X0 X3) (k1_funct_1 X1 X3)))))))))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))\Rightarrow(((\neg v1_xboole_0 X1)\wedge((v1_prob_1 X1 X0)\wedge(v3_measure1 X1 \\ & X0)))\Rightarrow((\neg v1_xboole_0 X1)\wedge(v1_finsub_1 X1))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.(((v1_relat_1 X0)\wedge(v3_valued_0 X0))\Rightarrow((v1_relat_1 \\ & X0)\wedge(v1_valued_0 X0))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 \\ & X0)))\Rightarrow(((v1_prob_1 X1 X0)\wedge(v4_prob_1 X1 X0))\Rightarrow(v3_measure1 X1 \\ & X0)) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))\Rightarrow((v4_relat_1 X2 X0)\wedge(v5_relat_1 X2 X1)) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k1_zfmisc_1 X0)))\Rightarrow(((v1_finsub_1 X1)\wedge(v1_prob_1 X1 X0))\Rightarrow(v2_finsub_1 X1)) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.(v3_membered X1)\Rightarrow(\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v3_valued_0 X2)) \quad (14)$$

Theorem 1

$$\begin{aligned} & \forall X0.(\neg v1_xboole_0 X0)\Rightarrow(\forall X1.((\neg v1_xboole_0 X1)\wedge \\ & ((v1_prob_1 X1 X0)\wedge((v4_prob_1 X1 X0)\wedge(m1_subset_1 X1 (k1_zfmisc_1 \\ & (k1_zfmisc_1 X0))))))\Rightarrow(\forall X2.((v1_funct_1 X2)\wedge(m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 k1_numbers))))\Rightarrow(\forall X3.(\\ & (v1_funct_1 X3)\wedge(m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ & k1_numbers))))\Rightarrow(((k1_relset_1 X0 X2 \in X1)\wedge(k1_relset_1 X0 X3 \in \\ & X1))\Rightarrow(k1_relset_1 X0 (k3_valued_1 X0 k1_numbers k1_numbers X2 \\ & X3) \in X1)))))) \end{aligned}$$