

t10_cfunct_1
(TMLMSTF4J6zGkif32dA6ZdzrD89HniX277v)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_numbers : \iota$ be given. Let $k8_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_numbers : \iota$ be given. Let $k55_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k31_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $k8_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k54_valued_1 : \iota \Rightarrow \iota$ be given. Let $k30_valued_1 : \iota \Rightarrow \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow \\ & ((k8_relat_1 (k54_valued_1 X0) (k1_tarski k6_numbers) = k8_relat_1 \\ & X0 (k1_tarski k6_numbers)) \wedge (k8_relat_1 (k30_valued_1 X0) (k1_tarski \\ & k6_numbers) = k8_relat_1 X0 (k1_tarski k6_numbers))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (m1_subset_1 X2 (\\ & k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (k8_relset_1 X0 X1 X2 X3 = k8_relat_1 \\ & X2 X3) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_membered X1) \wedge ((v1_funct_1 \\ & X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \Rightarrow (k55_valued_1 \\ & X0 X1 X2 = k54_valued_1 X2) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_membered X1) \wedge ((v1_funct_1 \\ & X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \Rightarrow (k31_valued_1 \\ & X0 X1 X2 = k30_valued_1 X2) \end{aligned} \tag{4}$$

Assume the following.

$$v1_membered\ k2_numbers \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((v1_membered\ X1)\wedge((v1_funct_1 \\ X2)\wedge(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1))))))\Rightarrow((v1_funct_1 \\ (k55_valued_1\ X0\ X1\ X2))\wedge(m1_subset_1\ (k55_valued_1\ X0\ X1\ X2)\ (\\ k1_zfmisc_1\ (k2_zfmisc_1\ X0\ k1_numbers)))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((v1_membered\ X1)\wedge((v1_funct_1 \\ X2)\wedge(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1))))))\Rightarrow((v1_funct_1 \\ (k31_valued_1\ X0\ X1\ X2))\wedge(m1_subset_1\ (k31_valued_1\ X0\ X1\ X2)\ (\\ k1_zfmisc_1\ (k2_zfmisc_1\ X0\ k2_numbers)))) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))\Rightarrow(v1_relat_1\ X2) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.(v1_membered\ X1)\Rightarrow(\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))\Rightarrow(v1_valued_0\ X2)) \quad (9)$$

Theorem 1

$$\begin{aligned} \forall X0.(\neg v1_xboole_0\ X0)\Rightarrow(\forall X1.((v1_funct_1\ X1)\wedge(\\ m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ k2_numbers))))\Rightarrow(\\ (k8_relset_1\ X0\ k1_numbers\ (k55_valued_1\ X0\ k2_numbers\ X1)\ (k1_tarski \\ k6_numbers) = k8_relset_1\ X0\ k2_numbers\ X1\ (k1_tarski\ k6_numbers))\wedge \\ (k8_relset_1\ X0\ k2_numbers\ (k31_valued_1\ X0\ k2_numbers\ X1)\ (k1_tarski \\ k6_numbers) = k8_relset_1\ X0\ k2_numbers\ X1\ (k1_tarski\ k6_numbers)))) \end{aligned}$$