

t35_funct_8

(TMc4ka1QtufWFVJnWQNWPJZNNzbPSPKo1zZ)

October 27, 2020

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 $k1_numbers : \iota$ be given. Let $v6_funct_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k37_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k5_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $v3_membered : \iota \Rightarrow o$ be given. Let $k35_valued_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_membered : \iota \Rightarrow o$ be given. Let $v5_funct_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_real_1 : \iota \Rightarrow \iota$ be given. Let $v2_funct_8 : \iota \Rightarrow o$ be given. Let $v1_funct_8 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k5_xcmplx_0 (k4_xcmplx_0 X0) = k4_xcmplx_0 (k5_xcmplx_0 X0)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v3_membered X1) \wedge ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \Rightarrow (k37_valued_1 X0 X1 X2 = k35_valued_1 X2) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1) \wedge (v4_relat_1 X1 X0)) \Rightarrow (k1_relset_1 X0 X1 = k9_xtuple_0 X1) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k5_xcmplx_0 (k5_xcmplx_0 X0) = X0) \quad (4)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow (k35_valued_1 (k35_valued_1 X0) = X0) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_valued_0 X0)))\Rightarrow(v1_xcmplx_0 (k1_funct_1 X0 X1)) \quad (6)$$

Assume the following.

$$v3_membered k1_numbers \quad (7)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0)\Rightarrow(v1_xcmplx_0 (k4_xcmplx_0 X0)) \quad (8)$$

Assume the following.

$$\begin{aligned} &\forall X0.\forall X1.\forall X2.((v3_membered X1)\wedge((v1_funct_1 \\ &X2)\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))))\Rightarrow((v1_funct_1 \\ &(k37_valued_1 X0 X1 X2))\wedge(m1_subset_1 (k37_valued_1 X0 X1 X2) (\\ &k1_zfmisc_1 (k2_zfmisc_1 X0 k1_numbers)))) \quad (9) \end{aligned}$$

Assume the following.

$$\begin{aligned} &\forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_valued_0 X0)))\Rightarrow \\ &((v1_relat_1 (k35_valued_1 X0))\wedge((v1_funct_1 (k35_valued_1 \\ &X0))\wedge(v1_valued_0 (k35_valued_1 X0)))) \quad (10) \end{aligned}$$

Assume the following.

$$\begin{aligned} &\forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_valued_0 X0)))\Rightarrow \\ &(\forall X1.((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_valued_0 \\ &X1)))\Rightarrow((X1 = k35_valued_1 X0)\Leftrightarrow((k9_xtuple_0 X1 = k9_xtuple_0 X0)\wedge \\ &(\forall X2.(X2 \in k9_xtuple_0 X1)\Rightarrow(k1_funct_1 X1 X2 = k5_xcmplx_0 \\ &(k1_funct_1 X0 X2)))))) \quad (11) \end{aligned}$$

Assume the following.

$$\begin{aligned} &\forall X0.(v1_membered X0)\Rightarrow(\forall X1.(v1_membered X1)\Rightarrow(\forall X2. \\ &((v1_funct_1 X2)\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ &X1))))\Rightarrow((v5_funct_8 X2 X0 X1)\Leftrightarrow(\forall X3.(m1_subset_1 X3 k1_numbers)\Rightarrow \\ &(((X3 \in k1_relset_1 X0 X2)\wedge(k1_real_1 X3 \in k1_relset_1 X0 X2))\Rightarrow(\\ &k1_funct_1 X2 (k1_real_1 X3) = k4_xcmplx_0 (k1_funct_1 X2 X3)))))) \quad (12) \end{aligned}$$

Assume the following.

$$\forall X0.(v1_relat_1 X0)\Rightarrow((v2_funct_8 X0)\Leftrightarrow(v1_funct_8 (k9_xtuple_0 X0))) \quad (13)$$

Assume the following.

$$\forall X0.(v3_membered X0)\Rightarrow(v1_membered X0) \quad (14)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_membered\ X0)\wedge(v1_membered\ X1))\Rightarrow(\\ & \forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))\Rightarrow \\ & (((v1_funct_1\ X2)\wedge(v6_funct_8\ X2\ X0\ X1))\Rightarrow((v1_funct_1\ X2)\wedge(\\ & v2_funct_8\ X2)\wedge(v5_funct_8\ X2\ X0\ X1)))) \end{aligned} \quad (15)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((v1_membered\ X0)\wedge(v1_membered\ X1))\Rightarrow(\\ & \forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))\Rightarrow \\ & (((v1_funct_1\ X2)\wedge((v2_funct_8\ X2)\wedge(v5_funct_8\ X2\ X0\ X1)))\Rightarrow(\\ & (v1_funct_1\ X2)\wedge(v6_funct_8\ X2\ X0\ X1)))) \end{aligned} \quad (16)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1 \\ & (k2_zfmisc_1\ X0\ X1)))\Rightarrow((v4_relat_1\ X2\ X0)\wedge(v5_relat_1\ X2\ X1)) \end{aligned} \quad (17)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1_subset_1\ X2\ (k1_zfmisc_1 \\ & (k2_zfmisc_1\ X0\ X1)))\Rightarrow(v1_relat_1\ X2) \end{aligned} \quad (18)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(v1_membered\ X1)\Rightarrow(\forall X2.(m1_subset_1 \\ & X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))\Rightarrow(v1_valued_0\ X2)) \end{aligned} \quad (19)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_funct_1\ X0)\wedge(m1_subset_1\ X0\ (k1_zfmisc_1\ (k2_zfmisc_1 \\ & k1_numbers\ k1_numbers))))\Rightarrow((v6_funct_8\ X0\ k1_numbers\ k1_numbers)\Rightarrow \\ & (v6_funct_8\ (k37_valued_1\ k1_numbers\ k1_numbers\ X0)\ k1_numbers \\ & k1_numbers)) \end{aligned}$$