

t44_valued_2 (TMTnrGnxp- KJW2xC7dg3RDZYSYEpDsGBvjPb)

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Let $v1_valued_2 : \iota \Rightarrow o$ 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 $k26_valued_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_valued_2 : \iota \Rightarrow \iota$ be given. Let $k1_valued_2 : \iota \Rightarrow \iota$ be given. Let $k25_valued_2 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $k54_valued_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_valued_2 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1_valued_2 X1) \wedge ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \Rightarrow (k26_valued_2 X0 X1 X2 = k25_valued_2 X2) \quad (1)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow (k54_valued_1 (k54_valued_1 X0) = k54_valued_1 X0) \quad (2)$$

Assume the following.

$$\forall X0.v1_valued_2 (k2_valued_2 X0) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1_valued_2 X2) \wedge ((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 X2)))))) \Rightarrow (v1_valued_0 (k1_funct_1 X3 X1)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1_valued_2 X2) \wedge ((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 X2)))))) \Rightarrow ((v1_relat_1 (k1_funct_1 X3 X1)) \wedge (v1_funct_1 (k1_funct_1 X3 X1))) \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((v1_valued_2 X1)\wedge((v1_funct_1 \\ & X2)\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))))))\Rightarrow((v1_funct_1 \\ & (k26_valued_2 X0 X1 X2))\wedge(m1_subset_1 (k26_valued_2 X0 X1 X2) (\\ & k1_zfmisc_1 (k2_zfmisc_1 X0 (k2_valued_2 (k1_valued_2 X1)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v7_valued_2 X0)))\Rightarrow \\ & ((v1_relat_1 (k25_valued_2 X0))\wedge(v1_funct_1 (k25_valued_2 X0))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v7_valued_2 X0)))\Rightarrow \\ & (\forall X1.((v1_relat_1 X1)\wedge(v1_funct_1 X1))\Rightarrow((X1 = k25_valued_2 \\ & X0)\Leftrightarrow((k9_xtuple_0 X1 = k9_xtuple_0 X0)\wedge(\forall X2.(X2 \in k9_xtuple_0 \\ & X1)\Rightarrow(k1_funct_1 X1 X2 = k54_valued_1 (k1_funct_1 X0 X2)))))) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(v1_valued_2 X1)\Rightarrow(\forall X2.(m1_subset_1 \\ & X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((v1_funct_1 X2)\Rightarrow((v1_funct_1 \\ & X2)\wedge(v7_valued_2 X2)))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \end{aligned} \quad (10)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.(v1_valued_2 X1)\Rightarrow(\forall X2.((v1_funct_1 \\ & X2)\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))))\Rightarrow(k26_valued_2 \\ & X0 (k2_valued_2 (k1_valued_2 X1)) (k26_valued_2 X0 X1 X2) = k26_valued_2 \\ & X0 X1 X2)) \end{aligned}$$