

t65_valued_2 (TMMUkzcWnViUEikcDkctqUP- prGNdVbVpHgn)

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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 $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $k58_valued_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_valued_2 : \iota \Rightarrow \iota$ be given. Let $k1_valued_2 : \iota \Rightarrow \iota$ be given. Let $k52_valued_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k45_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k30_valued_1 : \iota \Rightarrow \iota$ be given. Let $k1_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (v1_valued_2 X1) \Rightarrow (\forall X2. ((v1_funct_1 \\ & X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \Rightarrow (\forall X3. \\ & ((v1_relat_1 X3) \wedge ((v1_funct_1 X3) \wedge (v1_valued_0 X3))) \Rightarrow (k58_valued_2 \\ & X0 X1 X2 (k30_valued_1 X3) = k52_valued_2 X0 X1 X2 X3)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (v1_valued_2 X1) \Rightarrow (\forall X2. ((v1_funct_1 \\ & X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \Rightarrow (\forall X3. \\ & ((v1_relat_1 X3) \wedge ((v1_funct_1 X3) \wedge (v1_valued_0 X3))) \Rightarrow (\forall X4. \\ & ((v1_relat_1 X4) \wedge ((v1_funct_1 X4) \wedge (v1_valued_0 X4))) \Rightarrow (k52_valued_2 \\ & (k3_xboole_0 X0 (k9_xtuple_0 X3)) (k2_valued_2 (k1_valued_2 X1)) \\ & (k52_valued_2 X0 X1 X2 X3) X4 = k52_valued_2 X0 X1 X2 (k1_valued_1 \\ & X3 X4)))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. ((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow (k30_valued_1 (k30_valued_1 X0) = X0) \quad (3)$$

Assume the following.

$$\forall X0. v1_valued_2 (k2_valued_2 X0) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((v1_valued_2 X1)\wedge \\ & ((v1_funct_1 X2)\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X1))))\wedge((v1_relat_1 X3)\wedge((v1_funct_1 X3)\wedge(v1_valued_0 X3))))\Rightarrow \\ & ((v1_funct_1 (k52_valued_2 X0 X1 X2 X3))\wedge(m1_subset_1 (k52_valued_2 \\ & X0 X1 X2 X3) (k1_zfmisc_1 (k2_zfmisc_1 (k3_xboole_0 X0 (k9_xtuple_0 \\ & X3)) (k2_valued_2 (k1_valued_2 X1)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_valued_0 X0)))\Rightarrow \\ & ((v1_relat_1 (k30_valued_1 X0))\wedge((v1_funct_1 (k30_valued_1 \\ & X0))\wedge(v1_valued_0 (k30_valued_1 X0)))) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0)\wedge((v1_funct_1 X0)\wedge(v1_valued_0 X0)))\Rightarrow \\ & (\forall X1.((v1_relat_1 X1)\wedge((v1_funct_1 X1)\wedge(v1_valued_0 \\ & X1)))\Rightarrow(k45_valued_1 X0 X1 = k1_valued_1 X0 (k30_valued_1 X1))) \end{aligned} \quad (7)$$

Theorem 1

$$\begin{aligned} & \forall X0.\forall X1.(v1_valued_2 X1)\Rightarrow(\forall X2.((v1_funct_1 \\ & X2)\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))))\Rightarrow(\forall X3. \\ & ((v1_relat_1 X3)\wedge((v1_funct_1 X3)\wedge(v1_valued_0 X3)))\Rightarrow(\forall X4. \\ & ((v1_relat_1 X4)\wedge((v1_funct_1 X4)\wedge(v1_valued_0 X4)))\Rightarrow(k58_valued_2 \\ & (k3_xboole_0 X0 (k9_xtuple_0 X3)) (k2_valued_2 (k1_valued_2 X1)) \\ & (k52_valued_2 X0 X1 X2 X3) X4 = k52_valued_2 X0 X1 X2 (k45_valued_1 \\ & X3 X4)))) \end{aligned}$$