

t9_valued_2

(TMQknq2AmKSqpQCsmxk5K86nj2NnwtATB1o)

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Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_valued_0 : \iota \Rightarrow o$ be given. Let $v2_relat_1 : \iota \Rightarrow o$ be given. Let $k24_valued_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 X0))) \Rightarrow \\ (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (\forall X2.k1_funct_1 (k24_valued_1 \\ X0 X1) X2 = k3_xcmplx_0 X1 (k1_funct_1 X0 X2))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow (\forall X2. \\ (v1_xcmplx_0 X2) \Rightarrow ((k3_xcmplx_0 X1 X0 = k3_xcmplx_0 X2 X0) \Rightarrow ((X0 = \\ k6_numbers) \vee (X1 = X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_valued_0 \\ X0))) \Rightarrow (v1_xcmplx_0 (k1_funct_1 X0 X1)) \quad (5)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v1_xboole_0 X0)\wedge(v1_relat_1 X0)\wedge((v2_relat_1 X0)\wedge(v1_funct_1 X0))))\wedge(m1_subset_1 X1 (k9_xtuple_0 X0))\Rightarrow(\neg v1_xboole_0 (k1_funct_1 X0 X1)) \quad (7)$$

Assume the following.

$$\forall X0.\exists X1.m1_subset_1 X1 X0 \quad (8)$$

Theorem 1

$$\forall X0.(v1_xcmplx_0 X0)\Rightarrow(\forall X1.(v1_xcmplx_0 X1)\Rightarrow(\forall X2.((v1_relat_1 X2)\wedge(v1_funct_1 X2)\wedge(v1_valued_0 X2))\Rightarrow(((v2_relat_1 X2)\wedge(k24_valued_1 X2 X0 = k24_valued_1 X2 X1))\Rightarrow((X2 = k1_xboole_0)\vee(X0 = X1))))))$$