

t68_glib_000

(TMWvg8yymsNDTFFzFivvkvKDPwnYUchuGNg)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_glib_000 : \iota \Rightarrow o$ be given. Let $v2_glib_000 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_glib_000 : \iota \Rightarrow \iota$ be given. Let $r1_glib_000 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np_1 : \iota$ be given. Let $k35_glib_000 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k28_glib_000 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $np_0 : \iota$ be given. Let $k4_ordinal1 : \iota$ be given. Let $v6_membered : \iota \Rightarrow o$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v10_glib_000 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. r1_xboole_0 (k4_xboole_0 X0 X1) X1 \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1. \forall X2. \\ \forall X3. (m1_subset_1 X3 (k6_glib_000 X0)) \Rightarrow ((r1_glib_000 X0 \\ X3 X2 X1) \Rightarrow (X1 \in k28_glib_000 X0 X3))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. (v7_ordinal1 X0) \Rightarrow ((\neg r1_xxreal_0 np_1 X0) \Rightarrow (X0 = k6_numbers)) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge ((v4_relat_1 X0 k5_numbers) \wedge ((v1_funct_1 \\ X0) \wedge ((v1_finset_1 X0) \wedge (v1_glib_000 X0)))))) \Rightarrow (\forall X1. \forall X2. \\ \forall X3. (r1_glib_000 X0 X2 X3 X1) \Rightarrow (r1_glib_000 X0 X3 X2 X1)) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (r1_xboole_0 X0 X1) \Rightarrow (r1_xboole_0 X1 X0) \quad (5)$$

Assume the following.

$$v1_xboole_0 \text{ np_}0 \quad (6)$$

Assume the following.

$$k5_numbers = k4_ordinal1 \quad (7)$$

Assume the following.

$$v6_membered \ k4_ordinal1 \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(((v1_relat_1 \ X0)\wedge((v4_relat_1 \ X0 \ k5_numbers)\wedge \\ ((v1_funct_1 \ X0)\wedge((v1_finset_1 \ X0)\wedge((v1_glib_000 \ X0)\wedge(v2_glib_000 \\ X0))))))\wedge(m1_subset_1 \ X1 \ (k6_glib_000 \ X0)))\Rightarrow(m1_subset_1 \ (k35_glib_000 \\ X0 \ X1) \ k5_numbers) \end{aligned} \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(r1_xboole_0 \ X0 \ X1)\Leftrightarrow(k3_xboole_0 \ X0 \ X1 = k1_xboole_0) \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.(((v1_relat_1 \ X0)\wedge((v4_relat_1 \ X0 \ k5_numbers)\wedge((v1_funct_1 \\ X0)\wedge((v1_finset_1 \ X0)\wedge((v1_glib_000 \ X0)\wedge(v2_glib_000 \ X0))))))\Rightarrow \\ (\forall X1.(m1_subset_1 \ X1 \ (k6_glib_000 \ X0))\Rightarrow((v10_glib_000 \\ X1 \ X0)\Leftrightarrow(k35_glib_000 \ X0 \ X1 = k6_numbers))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k3_xboole_0 \ X0 \ X1)\Leftrightarrow(\forall X3. (X3 \in X2)\Leftrightarrow((X3 \in X0)\wedge(X3 \in X1))) \quad (12)$$

Assume the following.

$$\begin{aligned} \forall X0.(((v1_relat_1 \ X0)\wedge((v4_relat_1 \ X0 \ k5_numbers)\wedge((v1_funct_1 \\ X0)\wedge((v1_finset_1 \ X0)\wedge(v1_glib_000 \ X0))))))\Rightarrow(\forall X1.(m1_subset_1 \\ X1 \ (k6_glib_000 \ X0))\Rightarrow((v10_glib_000 \ X1 \ X0)\Leftrightarrow(k28_glib_000 \ X0 \ X1 = \\ k1_xboole_0))) \end{aligned} \quad (13)$$

Assume the following.

$$\forall X0.(v1_xboole_0 \ X0)\Leftrightarrow(\forall X1.\neg X1 \in X0) \quad (14)$$

Assume the following.

$$\forall X0.(v6_membered \ X0)\Rightarrow(\forall X1.(m1_subset_1 \ X1 \ X0)\Rightarrow (v7_ordinal1 \ X1)) \quad (15)$$

Theorem 1

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge ((v4_relat_1 X0 \ k5_numbers) \wedge ((v1_funct_1 \\ & X0) \wedge ((v1_finset_1 X0) \wedge ((v1_glib_000 X0) \wedge (v2_glib_000 X0)))))) \Rightarrow \\ & (\forall X1. \forall X2. (m1_subset_1 X2 (k6_glib_000 X0)) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (k6_glib_000 X0)) \Rightarrow ((r1_glib_000 X0 X2 X3 X1) \Rightarrow (\\ & (r1_xxreal_0 \ np_1 (k35_glib_000 X0 X2)) \wedge (r1_xxreal_0 \ np_1 (\\ & k35_glib_000 X0 X3)))))) \end{aligned}$$