

t54_bcialg_6 (TMSyXmTpXsgwBd- scHk9YohhSfZDuqAUUPrn)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v3_bcialg_1 : \iota \Rightarrow o$ be given. Let $v4_bcialg_1 : \iota \Rightarrow o$ be given. Let $v5_bcialg_1 : \iota \Rightarrow o$ be given. Let $v7_bcialg_1 : \iota \Rightarrow o$ be given. Let $l2_bcialg_1 : \iota \Rightarrow o$ be given. Let $m2_bcialg_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m5_bcialg_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v2_bcialg_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $k5_bcialg_6 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_bcialg_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_bcialg_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_bcialg_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\
& X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow \\
& (\forall X1.((\neg v2_struct_0 X1) \wedge ((v3_bcialg_1 X1) \wedge ((v4_bcialg_1 \\
& X1) \wedge ((v5_bcialg_1 X1) \wedge ((v7_bcialg_1 X1) \wedge (l2_bcialg_1 X1)))))) \Rightarrow \\
& (\forall X2.(m1_bcialg_1 X2 X0) \Rightarrow (\forall X3.(m2_bcialg_1 X3 X1) \Rightarrow \\
& (\forall X4.(m5_bcialg_2 X4 X1 X3) \Rightarrow (\forall X5.((v1_funct_1 X5) \wedge \\
& ((v1_funct_2 X5 (u1_struct_0 X1) (u1_struct_0 X0)) \wedge ((v2_bcialg_6 \\
& X5 X1 X0) \wedge (m1_subset_1 X5 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 \\
& X1) (u1_struct_0 X0)))))) \Rightarrow (((X3 = k5_bcialg_6 X1 X0 X5) \wedge (u1_struct_0 \\
& X2 = k2_relset_1 (u1_struct_0 X0) X5)) \Rightarrow (r1_bcialg_6 (k9_bcialg_2 \\
& X1 X4) X2))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_bcialg_1 X0) \wedge ((v4_bcialg_1 \\
& X0) \wedge ((v5_bcialg_1 X0) \wedge ((v7_bcialg_1 X0) \wedge (l2_bcialg_1 X0)))))) \Rightarrow \\
& (m1_bcialg_1 X0 X0)
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v5_relat_1 X1 X0)) \Rightarrow (\\
& (v2_funct_2 X1 X0) \Leftrightarrow (k2_relset_1 X0 X1 = X0))
\end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow((v4_relat_1 X2 X0)\wedge(v5_relat_1 X2 X1)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))\Rightarrow(v1_relat_1 X2) \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge((v3_bcialg_1 X0)\wedge((v4_bcialg_1 X0)\wedge((v5_bcialg_1 X0)\wedge((v7_bcialg_1 X0)\wedge(l2_bcialg_1 X0))))))\Rightarrow \\ & (\forall X1.((\neg v2_struct_0 X1)\wedge((v3_bcialg_1 X1)\wedge((v4_bcialg_1 X1)\wedge((v5_bcialg_1 X1)\wedge((v7_bcialg_1 X1)\wedge(l2_bcialg_1 X1))))))\Rightarrow \\ & (\forall X2.(m2_bcialg_1 X2 X0)\Rightarrow(\forall X3.(m5_bcialg_2 X3 X0 X2)\Rightarrow(\forall X4.((v1_funct_1 X4)\wedge((v1_funct_2 X4 (u1_struct_0 X0) (u1_struct_0 X1))\wedge((v2_bcialg_6 X4 X0 X1)\wedge(m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X1))))))\Rightarrow \\ & (((X2 = k5_bcialg_6 X0 X1 X4)\wedge(v2_funct_2 X4 (u1_struct_0 X1))\Rightarrow (r1_bcialg_6 (k9_bcialg_2 X0 X3) X1)))))) \end{aligned}$$