

t58_analmetr

(TMb5toonhmP3BxdN4ARVHUvEUhxk3K4hwoe)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v2_analmetr : \iota \Rightarrow o$ be given. Let $l1_analmetr : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r4_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_analoaf : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_struct_0 : \iota \Rightarrow o$ be given. Let $v1_diraf : \iota \Rightarrow o$ be given. Let $l1_analoaf : \iota \Rightarrow o$ be given. Let $k3_analmetr : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g1_analoaf : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_analoaf : \iota \Rightarrow \iota$ be given. Let $v1_analoaf : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\ & X0)) \Rightarrow ((r2_analoaf X0 X1 X2 X3 X3) \wedge (r2_analoaf X0 X3 X3 X1 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_analmetr X0)) \Rightarrow (\forall X1. \\ & (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow \\ & (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow (\forall X5.(m1_subset_1 \\ & X5 (u1_struct_0 (k3_analmetr X0))) \Rightarrow (\forall X6.(m1_subset_1 \\ & X6 (u1_struct_0 (k3_analmetr X0))) \Rightarrow (\forall X7.(m1_subset_1 \\ & X7 (u1_struct_0 (k3_analmetr X0))) \Rightarrow (\forall X8.(m1_subset_1 \\ & X8 (u1_struct_0 (k3_analmetr X0))) \Rightarrow (((X1 = X5) \wedge ((X2 = X6) \wedge ((X3 = \\ & X7) \wedge (X4 = X8)))) \Rightarrow ((r2_analoaf X0 X1 X2 X3 X4) \Leftrightarrow (r2_analoaf (k3_analmetr \\ & X0) X5 X6 X7 X8)))))))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k2_zfmisc_1 X0 X0) (k2_zfmisc_1 X0 X0)))) \Rightarrow (\forall X2. \forall X3. \\ & (g1_analoaf X0 X1 = g1_analoaf X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.(l1_analoaf\ X0)\Rightarrow(m1_subset_1\ (u1_analoaf\ X0)\ (k1_zfmisc_1\ (k2_zfmisc_1\ (k2_zfmisc_1\ (u1_struct_0\ X0)\ (u1_struct_0\ X0))\ (k2_zfmisc_1\ (u1_struct_0\ X0)\ (u1_struct_0\ X0))))\ (4)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0\ X0)\wedge(l1_analmetr\ X0))\Rightarrow((v1_analoaf\ (k3_analmetr\ X0))\wedge(l1_analoaf\ (k3_analmetr\ X0)))\ (5)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0\ X0)\wedge(l1_analmetr\ X0))\Rightarrow((v2_analmetr\ X0)\Leftrightarrow(((\neg v7_struct_0\ (g1_analoaf\ (u1_struct_0\ X0)\ (u1_analoaf\ X0)))\wedge((v1_diraf\ (g1_analoaf\ (u1_struct_0\ X0)\ (u1_analoaf\ X0)))\wedge(l1_analoaf\ (g1_analoaf\ (u1_struct_0\ X0)\ (u1_analoaf\ X0))))\wedge((\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ X0))\Rightarrow(\forall X2.(m1_subset_1\ X2\ (u1_struct_0\ X0))\Rightarrow(\forall X3.(m1_subset_1\ X3\ (u1_struct_0\ X0))\Rightarrow(\forall X4.(m1_subset_1\ X4\ (u1_struct_0\ X0))\Rightarrow(\forall X5.(m1_subset_1\ X5\ (u1_struct_0\ X0))\Rightarrow(\forall X6.(m1_subset_1\ X6\ (u1_struct_0\ X0))\Rightarrow(\forall X7.(m1_subset_1\ X7\ (u1_struct_0\ X0))\Rightarrow(\forall X8.(m1_subset_1\ X8\ (u1_struct_0\ X0))\Rightarrow(((r4_analmetr\ X0\ X1\ X2\ X1\ X2)\Rightarrow(X1 = X2))\wedge((r4_analmetr\ X0\ X1\ X2\ X3\ X3)\wedge(((r4_analmetr\ X0\ X1\ X2\ X3\ X4)\Rightarrow((r4_analmetr\ X0\ X1\ X2\ X4\ X3)\wedge(r4_analmetr\ X0\ X3\ X4\ X1\ X2)))\wedge((\neg(r4_analmetr\ X0\ X1\ X2\ X5\ X6)\wedge((r2_analoaf\ X0\ X1\ X2\ X7\ X8)\wedge((\neg r4_analmetr\ X0\ X5\ X6\ X7\ X8)\wedge(X1\neq X2))))\wedge(((r4_analmetr\ X0\ X1\ X2\ X5\ X6)\wedge(r4_analmetr\ X0\ X1\ X2\ X5\ X8))\Rightarrow(r4_analmetr\ X0\ X1\ X2\ X6\ X8))))))))))\wedge((\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ X0))\Rightarrow(\forall X2.(m1_subset_1\ X2\ (u1_struct_0\ X0))\Rightarrow(\forall X3.(m1_subset_1\ X3\ (u1_struct_0\ X0))\Rightarrow(\neg(X1\neq X2)\wedge(\forall X4.(m1_subset_1\ X4\ (u1_struct_0\ X0))\Rightarrow(\neg(r2_analoaf\ X0\ X1\ X2\ X1\ X4)\wedge(r4_analmetr\ X0\ X1\ X2\ X4\ X3))))))\wedge(\forall X1.(m1_subset_1\ X1\ (u1_struct_0\ X0))\Rightarrow(\forall X2.(m1_subset_1\ X2\ (u1_struct_0\ X0))\Rightarrow(\forall X3.(m1_subset_1\ X3\ (u1_struct_0\ X0))\Rightarrow(\exists X4.(m1_subset_1\ X4\ (u1_struct_0\ X0))\wedge((r4_analmetr\ X0\ X1\ X2\ X3\ X4)\wedge(X3\neq X4))))))))))\ (6) \end{aligned}$$

Assume the following.

$$\forall X0.((\neg v2_struct_0\ X0)\wedge(l1_analmetr\ X0))\Rightarrow(k3_analmetr\ X0 = g1_analoaf\ (u1_struct_0\ X0)\ (u1_analoaf\ X0))\ (7)$$

Assume the following.

$$\forall X0.(l1_analoaf\ X0)\Rightarrow((v1_analoaf\ X0)\Rightarrow(X0 = g1_analoaf\ (u1_struct_0\ X0)\ (u1_analoaf\ X0)))\ (8)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_analmetr X0) \wedge (l1_analmetr \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 \\ & (u1_struct_0 X0)) \Rightarrow ((r4_analmetr X0 X1 X2 X3 X3) \wedge ((r4_analmetr \\ & X0 X3 X3 X1 X2) \wedge ((r2_analoaf X0 X1 X2 X3 X3) \wedge (r2_analoaf X0 X3 X3 X1 \\ & X2)))))) \end{aligned}$$