

t48_analmetr
(TMVi5w2jGyUrCFLZgkqGhicsnznfi31TWpLm)

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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 $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $r6_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $g1_analoaf : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_analoaf : \iota \Rightarrow o$ be given. Let $u1_analoaf : \iota \Rightarrow \iota$ be given. Let $r4_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7_struct_0 X0) \wedge ((v1_diraf X0) \wedge (l1_analoaf X0))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 \\ & X2 (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 \\ & X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X0)) \Rightarrow ((r2_analoaf \\ & X0 X1 X2 X3 X4) \Rightarrow ((r2_analoaf X0 X1 X2 X4 X3) \wedge ((r2_analoaf X0 X2 X1 X3 \\ & X4) \wedge ((r2_analoaf X0 X2 X1 X4 X3) \wedge ((r2_analoaf X0 X3 X4 X1 X2) \wedge ((r2_analoaf \\ & X0 X3 X4 X2 X1) \wedge ((r2_analoaf X0 X4 X3 X1 X2) \wedge (r2_analoaf X0 X4 X3 X2 \\ & X1)))))))))) \end{aligned} \tag{1}$$

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.

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

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v2_analmetr X0) \wedge (l1_analmetr \\ & X0))) \Rightarrow ((\neg v7_struct_0 (k3_analmetr X0)) \wedge ((v1_analoaf (k3_analmetr \\ & X0)) \wedge (v1_diraf (k3_analmetr X0)))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. \exists X1. m1_subset_1 X1 X0 \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. (l1_analoaf X0) \Rightarrow (m1_subset_1 (u1_analoaf X0) (k1_zfmisc_1 \\ & (k2_zfmisc_1 (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)) \\ & (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))))) \end{aligned} \quad (6)$$

Assume the following.

$$\forall X0. (l1_analmetr X0) \Rightarrow (l1_analoaf X0) \quad (7)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k2_zfmisc_1 X0 X0) (k2_zfmisc_1 X0 X0)))) \Rightarrow ((v1_analoaf (g1_analoaf \\ & X0 X1)) \wedge (l1_analoaf (g1_analoaf X0 X1))) \end{aligned} \quad (8)$$

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)))))))))) \\
& \tag{9}
\end{aligned}$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0) \wedge (l1_analmetr X0)) \Rightarrow (k3_analmetr X0 = g1_analoaf (u1_struct_0 X0) (u1_analoaf X0)) \tag{10}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct_0 X0) \wedge (l1_analmetr X0)) \Rightarrow (\forall X1. \\
& (m1_subset_1 X1 (u1_struct_0 X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 \\
& (u1_struct_0 X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (k1_zfmisc.1 (\\
& u1_struct_0 X0))) \Rightarrow ((r6_analmetr X0 X1 X2 X3) \Leftrightarrow (\exists X4.(m1_subset_1 \\
& X4 (u1_struct_0 X0)) \wedge (\exists X5.(m1_subset_1 X5 (u1_struct_0 \\
& X0)) \wedge ((X4 \neq X5) \wedge ((X3 = k4_analmetr X0 X4 X5) \wedge (r4_analmetr X0 X1 X2 \\
& X4 X5)))))))))) \\
& \tag{11}
\end{aligned}$$

Assume the following.

$$\forall X0.(l1_analoaf X0) \Rightarrow ((v1_analoaf X0) \Rightarrow (X0 = g1_analoaf (u1_struct_0 X0) (u1_analoaf X0))) \tag{12}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v2_analmetr X0) \wedge (l1_analmetr \\ & X0))) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow (\forall X3. \\ & (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 \\ & (u1_struct_0 X0)) \Rightarrow (\forall X5.(m1_subset_1 X5 (u1_struct_0 X0)) \Rightarrow \\ & ((r6_analmetr X0 X2 X3 X1) \Rightarrow (((\neg r2_analoaf X0 X2 X3 X4 X5) \wedge (\neg r2_analoaf \\ & X0 X4 X5 X2 X3)) \vee ((X2 = X3) \vee (r6_analmetr X0 X4 X5 X1)))))))))) \end{aligned}$$