

t56\_analmetr  
(TMGN544hynHQ4Fm9Dq2pBcNpgGebk5aV8Ca)

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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  $r10\_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r4\_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r6\_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r7\_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_analmetr : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_analmetr X0) \wedge (l1\_analmetr \\ & \quad X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ & \quad X0))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3. \\ & \quad (m1\_subset\_1 X3 (u1\_struct\_0 X0)) \Rightarrow (\forall X4.(m1\_subset\_1 X4 \\ & \quad (u1\_struct\_0 X0)) \Rightarrow (\forall X5.(m1\_subset\_1 X5 (u1\_struct\_0 X0)) \Rightarrow \\ & \quad (((X2 \in X1) \wedge ((X3 \in X1) \wedge (r6\_analmetr X0 X4 X5 X1))) \Rightarrow ((r4\_analmetr \\ & \quad X0 X4 X5 X2 X3) \wedge (r4\_analmetr X0 X2 X3 X4 X5))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X2))) \Rightarrow (m1\_subset\_1 X0 X2) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2\_struct\_0 X0) \wedge ((v2\_analmetr \\ & \quad X0) \wedge (l1\_analmetr X0))) \wedge ((m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ & \quad X0))) \wedge (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))))) \Rightarrow ((r10\_analmetr \\ & \quad X0 X1 X2) \Leftrightarrow (r7\_analmetr X0 X1 X2)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l1\_analmetr X0)) \Rightarrow (\forall X1. \\ & \quad (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow (\forall X2. \\ & \quad (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow ((r7\_analmetr \\ & \quad X0 X1 X2) \Leftrightarrow (\exists X3.(m1\_subset\_1 X3 (u1\_struct\_0 X0)) \wedge (\exists X4. \\ & \quad (m1\_subset\_1 X4 (u1\_struct\_0 X0)) \wedge ((X3 \neq X4) \wedge ((X1 = k4\_analmetr \\ & \quad X0 X3 X4) \wedge (r6\_analmetr X0 X3 X4 X2)))))))))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_analmetr X0)) \Rightarrow (\forall X1. \\
& (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 \\
& (u1\_struct\_0 X0)) \Rightarrow (\forall X3.(m1\_subset\_1 X3 (k1\_zfmisc\_1 ( \\
& u1\_struct\_0 X0))) \Rightarrow ((r6\_analmetr X0 X1 X2 X3) \Leftrightarrow (\exists X4.(m1\_subset\_1 \\
& X4 (u1\_struct\_0 X0)) \wedge (\exists X5.(m1\_subset\_1 X5 (u1\_struct\_0 \\
& X0)) \wedge ((X4 \neq X5) \wedge ((X3 = k4\_analmetr X0 X4 X5) \wedge (r4\_analmetr X0 X1 X2 \\
& X4 X5)))))))))) \\
& \tag{5}
\end{aligned}$$

**Theorem 1**

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_analmetr X0) \wedge (l1\_analmetr \\
& X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\
& X0))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 \\
& X0))) \Rightarrow (\forall X3.(m1\_subset\_1 X3 (u1\_struct\_0 X0)) \Rightarrow (\forall X4. \\
& (m1\_subset\_1 X4 (u1\_struct\_0 X0)) \Rightarrow (\forall X5.(m1\_subset\_1 X5 \\
& (u1\_struct\_0 X0)) \Rightarrow (\forall X6.(m1\_subset\_1 X6 (u1\_struct\_0 X0)) \Rightarrow \\
& (((X3 \in X1) \wedge ((X4 \in X1) \wedge ((X5 \in X2) \wedge ((X6 \in X2) \wedge (r10\_analmetr X0 X1 X2)))))) \Rightarrow \\
& (r4\_analmetr X0 X3 X4 X5 X6)))))))))
\end{aligned}$$