

t43\_analmetr  
(TMZr2gzREdmWuEU2HgPjxY2aL3K85jgrHCg)

October 27, 2020

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  $k3\_analmetr : \iota \Rightarrow \iota$  be given. Let  $v4\_analmetr : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_aff\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_aff\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v7\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_analoaf : \iota \Rightarrow o$  be given. Let  $v1\_diraf : \iota \Rightarrow o$  be given. Let  $l1\_analoaf : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_analmetr X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Leftrightarrow (m1\_subset\_1 \\ & X1 (k1\_zfmisc\_1 (u1\_struct\_0 (k3\_analmetr X0)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_analmetr X0) \wedge (l1\_analmetr \\ & X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3.(m1\_subset\_1 X3 \\ & (u1\_struct\_0 (k3\_analmetr X0))) \Rightarrow (\forall X4.(m1\_subset\_1 X4 \\ & (u1\_struct\_0 (k3\_analmetr X0))) \Rightarrow (((X1 = X3) \wedge (X2 = X4)) \Rightarrow (k4\_analmetr \\ & X0 X1 X2 = k2\_aff\_1 (k3\_analmetr X0) X3 X4)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_analmetr X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Leftrightarrow (m1\_subset\_1 X1 (u1\_struct\_0 \\ & (k3\_analmetr X0)))) \end{aligned} \quad (3)$$

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.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0 X0)\wedge(l1\_analmetr X0))\wedge((m1\_subset\_1 X1 (u1\_struct\_0 X0))\wedge(m1\_subset\_1 X2 (u1\_struct\_0 X0))))\Rightarrow(m1\_subset\_1 (k4\_analmetr X0 X1 X2) (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \quad (5)$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0 X0)\wedge(l1\_analmetr X0))\Rightarrow((v1\_analoaf (k3\_analmetr X0))\wedge(l1\_analoaf (k3\_analmetr X0))) \quad (6)$$

Assume the following.

$$\begin{aligned} &\forall X0.((\neg v7\_struct\_0 X0)\wedge((v1\_diraf X0)\wedge(l1\_analoaf X0)))\Rightarrow \\ &(\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))\Rightarrow \\ &((v1\_aff\_1 X1 X0)\Leftrightarrow(\exists X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0))\wedge \\ &(\exists X3.(m1\_subset\_1 X3 (u1\_struct\_0 X0))\wedge((X2\neq X3)\wedge(X1 = k2\_aff\_1 X0 X2 X3)))))) \quad (7) \end{aligned}$$

Assume the following.

$$\begin{aligned} &\forall X0.((\neg v2\_struct\_0 X0)\wedge(l1\_analmetr X0))\Rightarrow(\forall X1. \\ &(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))\Rightarrow((v4\_analmetr \\ &X1 X0)\Leftrightarrow(\exists X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0))\wedge(\exists X3. \\ &(m1\_subset\_1 X3 (u1\_struct\_0 X0))\wedge((X2\neq X3)\wedge(X1 = k4\_analmetr \\ &X0 X2 X3)))))) \quad (8) \end{aligned}$$

### Theorem 1

$$\begin{aligned} &\forall X0.((\neg v2\_struct\_0 X0)\wedge((v2\_analmetr X0)\wedge(l1\_analmetr \\ &X0)))\Rightarrow(\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\ &X0)))\Rightarrow(\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 \\ &(k3\_analmetr X0))))\Rightarrow((X1 = X2)\Rightarrow((v4\_analmetr X1 X0)\Leftrightarrow(v1\_aff\_1 \\ &X2 (k3\_analmetr X0)))))) \end{aligned}$$