

# t2\_conmetr (TMcYHpCEguZajg- TyTmSBT7aHDdiKUDYP6VE)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v3\_analmetr : \iota \Rightarrow o$  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  $r5\_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v2\_analmetr : \iota \Rightarrow o$  be given. Let  $k3\_analmetr : \iota \Rightarrow \iota$  be given. Let  $r1\_aff\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  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  $v1\_analoaf : \iota \Rightarrow o$  be given. Let  $v2\_diraf : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v2\_analmetr X0) \wedge (l1\_analmetr \\ & X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3.(m1\_subset\_1 X3 \\ & (u1\_struct\_0 X0)) \Rightarrow (\forall X4.(m1\_subset\_1 X4 (u1\_struct\_0 ( \\ & k3\_analmetr X0))) \Rightarrow (\forall X5.(m1\_subset\_1 X5 (u1\_struct\_0 ( \\ & k3\_analmetr X0))) \Rightarrow (\forall X6.(m1\_subset\_1 X6 (u1\_struct\_0 ( \\ & k3\_analmetr X0)))) \Rightarrow (((X1 = X4) \wedge ((X2 = X5) \wedge (X3 = X6))) \Rightarrow ((r5\_analmetr \\ & X0 X1 X2 X3) \Leftrightarrow (r1\_aff\_1 (k3\_analmetr X0) X4 X5 X6))))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge (l1\_analmetr X0)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Leftrightarrow (m1\_subset\_1 X1 (u1\_struct\_0 \\ & (k3\_analmetr X0)))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v7\_struct\_0 X0) \wedge ((v1\_diraf X0) \wedge (l1\_analoaf X0))) \Rightarrow \\ & ((\exists X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \wedge (\exists X2.( \\ & m1\_subset\_1 X2 (u1\_struct\_0 X0)) \wedge (\exists X3.(m1\_subset\_1 X3 \\ & (u1\_struct\_0 X0)) \wedge ((r1\_aff\_1 X0 X1 X2 X3) \wedge ((X1 \neq X2) \wedge ((X1 \neq X3) \wedge \\ & (X2 \neq X3)))))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow \\ & (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\exists X3.(m1\_subset\_1 \\ & X3 (u1\_struct\_0 X0)) \wedge ((r1\_aff\_1 X0 X1 X2 X3) \wedge ((X1 \neq X3) \wedge (X2 \neq X3))))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v3\_analmetr X0) \wedge (l1\_analmetr \\ X0))) \Rightarrow (\exists X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \wedge (\exists X2. \\ (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \wedge (\exists X3.(m1\_subset\_1 X3 \\ (u1\_struct\_0 X0)) \wedge ((r5\_analmetr X0 X1 X2 X3) \wedge ((X1 \neq X2) \wedge ((X2 \neq X3) \wedge \\ (X3 \neq X1))))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v3\_analmetr X0) \wedge (l1\_analmetr \\ X0))) \Rightarrow ((\neg v7\_struct\_0 (k3\_analmetr X0)) \wedge ((v1\_analoaf (k3\_analmetr \\ X0)) \wedge ((v1\_diraf (k3\_analmetr X0)) \wedge (v2\_diraf (k3\_analmetr X0))))) \end{aligned} \quad (5)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} \forall X0.(l1\_analmetr X0) \Rightarrow (((\neg v2\_struct\_0 X0) \wedge (v3\_analmetr \\ X0)) \Rightarrow ((\neg v2\_struct\_0 X0) \wedge (v2\_analmetr X0))) \end{aligned} \quad (7)$$

**Theorem 1**

$$\begin{aligned} \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v3\_analmetr X0) \wedge (l1\_analmetr \\ X0))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\ (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\exists X3.(m1\_subset\_1 X3 \\ (u1\_struct\_0 X0)) \wedge ((r5\_analmetr X0 X1 X2 X3) \wedge ((X1 \neq X3) \wedge (X2 \neq X3)))))) \end{aligned}$$