

t24\_geomtrap  
(TMJpV45SqspjjeL9gsbn54Yo4jYwryvR3WL)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v13\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $v2\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v3\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v4\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v5\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v6\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v7\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $v8\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $l1\_rlvect\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_analmetr : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r2\_geomtrap : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v2\_rlvect\_1 \\ & X0) \wedge ((v3\_rlvect\_1 X0) \wedge ((v4\_rlvect\_1 X0) \wedge ((v5\_rlvect\_1 X0) \wedge \\ & ((v6\_rlvect\_1 X0) \wedge ((v7\_rlvect\_1 X0) \wedge ((v8\_rlvect\_1 X0) \wedge (l1\_rlvect\_1 \\ & X0)))))))))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow \\ & (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3.(m1\_subset\_1 \\ & X3 (u1\_struct\_0 X0)) \Rightarrow (\forall X4.(m1\_subset\_1 X4 (u1\_struct\_0 \\ & X0)) \Rightarrow (\forall X5.(m1\_subset\_1 X5 (u1\_struct\_0 X0)) \Rightarrow (((r1\_analmetr \\ & X0 X1 X2) \wedge (r2\_geomtrap X0 X1 X2 X3 X4 X3 X5)) \Rightarrow (X4 = X5))))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v13\_algstr\_0 X0) \wedge ((v2\_rlvect\_1 \\ & X0) \wedge ((v3\_rlvect\_1 X0) \wedge ((v4\_rlvect\_1 X0) \wedge ((v5\_rlvect\_1 X0) \wedge \\ & ((v6\_rlvect\_1 X0) \wedge ((v7\_rlvect\_1 X0) \wedge ((v8\_rlvect\_1 X0) \wedge (l1\_rlvect\_1 \\ & X0)))))))))) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow \\ & (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3.(m1\_subset\_1 \\ & X3 (u1\_struct\_0 X0)) \Rightarrow (\forall X4.(m1\_subset\_1 X4 (u1\_struct\_0 \\ & X0)) \Rightarrow (\forall X5.(m1\_subset\_1 X5 (u1\_struct\_0 X0)) \Rightarrow (\forall X6. \\ & (m1\_subset\_1 X6 (u1\_struct\_0 X0)) \Rightarrow (\forall X7.(m1\_subset\_1 X7 \\ & (u1\_struct\_0 X0)) \Rightarrow (\forall X8.(m1\_subset\_1 X8 (u1\_struct\_0 X0)) \Rightarrow \\ & (((r1\_analmetr X0 X1 X2) \wedge ((r2\_geomtrap X0 X1 X2 X3 X4 X5 X6) \wedge (r2\_geomtrap \\ & X0 X1 X2 X3 X4 X7 X8)) \Rightarrow ((X3 = X4) \vee (r2\_geomtrap X0 X1 X2 X5 X6 X7 X8)))))))))) \end{aligned} \quad (2)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0)\wedge((v13\_algstr\_0 X0)\wedge((v2\_rlvect\_1 \\ & X0)\wedge((v3\_rlvect\_1 X0)\wedge((v4\_rlvect\_1 X0)\wedge((v5\_rlvect\_1 X0)\wedge \\ & ((v6\_rlvect\_1 X0)\wedge((v7\_rlvect\_1 X0)\wedge((v8\_rlvect\_1 X0)\wedge(l1\_rlvect\_1 \\ & X0))))))))))\Rightarrow(\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0))\Rightarrow \\ & (\forall X2.(m1\_subset\_1 X2 (u1\_struct\_0 X0))\Rightarrow(\forall X3.(m1\_subset\_1 \\ & X3 (u1\_struct\_0 X0))\Rightarrow(\forall X4.(m1\_subset\_1 X4 (u1\_struct\_0 \\ & X0))\Rightarrow(\forall X5.(m1\_subset\_1 X5 (u1\_struct\_0 X0))\Rightarrow(\forall X6. \\ & (m1\_subset\_1 X6 (u1\_struct\_0 X0))\Rightarrow(\forall X7.(m1\_subset\_1 X7 \\ & (u1\_struct\_0 X0))\Rightarrow(\neg(r1\_analmetr X0 X1 X2)\wedge((r2\_geomtrap X0 X1 \\ & X2 X3 X4 X5 X6)\wedge((r2\_geomtrap X0 X1 X2 X3 X4 X5 X7)\wedge((X3\neq X4)\wedge(X6\neq X7))))))))))))) \end{aligned}$$