

## t13\_aff\_1

(TMYB37RSfzfVm9LRngEJvNa3t5gcR8SHEUr)

October 27, 2020

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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $r1\_aff\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((\neg v7\_struct\_0 X0) \wedge ((v1\_diraf X0) \wedge (l1\_analoaf X0))) \Rightarrow \\
 & (\forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2.(m1\_subset\_1 \\
 & X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3.(m1\_subset\_1 X3 (u1\_struct\_0 \\
 & X0)) \Rightarrow (\forall X4.(m1\_subset\_1 X4 (u1\_struct\_0 X0)) \Rightarrow (\forall X5. \\
 & (m1\_subset\_1 X5 (u1\_struct\_0 X0)) \Rightarrow (((r1\_aff\_1 X0 X1 X2 X3) \wedge ((r1\_aff\_1 \\
 & X0 X1 X2 X4) \wedge (r1\_aff\_1 X0 X1 X2 X5)))) \Rightarrow ((X1 = X2) \vee (r1\_aff\_1 X0 X3 X4 \\
 & X5)))))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.((\neg v7\_struct\_0 X0) \wedge ((v1\_diraf X0) \wedge (l1\_analoaf X0))) \Rightarrow \\
 & (\neg \forall X1.(m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2.( \\
 & m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3.(m1\_subset\_1 X3 \\
 & (u1\_struct\_0 X0)) \Rightarrow (r1\_aff\_1 X0 X1 X2 X3))))
 \end{aligned} \tag{2}$$

### Theorem 1

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