

t98\_group\_9  
(TMRF4cjNDT4Q3ttJ9WiprWKfx1WK6iJfWs3)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v2\_group\_1 : \iota \Rightarrow o$  be given. Let  $v3\_group\_1 : \iota \Rightarrow o$  be given. Let  $v3\_group\_9 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $l1\_group\_9 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v8\_group\_9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_group\_9 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r4\_group\_9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v10\_group\_9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v9\_group\_9 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2\_struct\_0 X1) \wedge ((v2\_group\_1 X1) \wedge \\ & (v3\_group\_1 X1) \wedge ((v3\_group\_9 X1 X0) \wedge (l1\_group\_9 X1 X0)))) \Rightarrow ( \\ & \forall X2. ((v8\_group\_9 X2 X0 X1) \wedge (m2\_finseq\_1 X2 (k6\_group\_9 \\ & X0 X1))) \Rightarrow ((v10\_group\_9 X2 X0 X1) \Leftrightarrow ((v9\_group\_9 X2 X0 X1) \wedge (\forall X3. \\ & ((v8\_group\_9 X3 X0 X1) \wedge (m2\_finseq\_1 X3 (k6\_group\_9 X0 X1))) \Rightarrow (\neg \\ & (X3 \neq X2) \wedge ((v9\_group\_9 X3 X0 X1) \wedge (r4\_group\_9 X0 X1 X3 X2)))))) \end{aligned} \quad (1)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v2\_struct\_0 X1) \wedge ((v2\_group\_1 X1) \wedge \\ & (v3\_group\_1 X1) \wedge ((v3\_group\_9 X1 X0) \wedge (l1\_group\_9 X1 X0)))) \Rightarrow ( \\ & \forall X2. ((v8\_group\_9 X2 X0 X1) \wedge (m2\_finseq\_1 X2 (k6\_group\_9 \\ & X0 X1))) \Rightarrow (\forall X3. ((v8\_group\_9 X3 X0 X1) \wedge (m2\_finseq\_1 X3 (k6\_group\_9 \\ & X0 X1))) \Rightarrow (((r4\_group\_9 X0 X1 X2 X3) \wedge ((v10\_group\_9 X2 X0 X1) \wedge (v10\_group\_9 \\ & X3 X0 X1))) \Rightarrow (X2 = X3)))) \end{aligned}$$