

t27\_bciideal  
(TMX6K3F4aKQfJePqTCP9P9VgNfZuotypKkp)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v3\_bcialg\_1 : \iota \Rightarrow o$  be given. Let  $v4\_bcialg\_1 : \iota \Rightarrow o$  be given. Let  $v5\_bcialg\_1 : \iota \Rightarrow o$  be given. Let  $v7\_bcialg\_1 : \iota \Rightarrow o$  be given. Let  $l2\_bcialg\_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_bcialg\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_bcialg\_1 : \iota \Rightarrow \iota$  be given. Let  $v8\_bcialg\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v3\_bcialg\_1 X0) \wedge ((v4\_bcialg\_1 \\ & X0) \wedge ((v5\_bcialg\_1 X0) \wedge ((v7\_bcialg\_1 X0) \wedge ((v8\_bcialg\_1 X0) \wedge \\ & (l2\_bcialg\_1 X0)))))) \Rightarrow (k4\_bcialg\_1 X0 = u1\_struct\_0 X0) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v3\_bcialg\_1 X0) \wedge ((v4\_bcialg\_1 \\ & X0) \wedge ((v5\_bcialg\_1 X0) \wedge ((v7\_bcialg\_1 X0) \wedge (l2\_bcialg\_1 X0)))))) \Rightarrow \\ & ((\forall X1. ((\neg v2\_struct\_0 X1) \wedge ((v3\_bcialg\_1 X1) \wedge ((v4\_bcialg\_1 \\ & X1) \wedge ((v5\_bcialg\_1 X1) \wedge ((v7\_bcialg\_1 X1) \wedge (l2\_bcialg\_1 X1)))))) \Rightarrow \\ & (\forall X2. (m1\_subset\_1 X2 (u1\_struct\_0 X1)) \Rightarrow (\forall X3. (m1\_subset\_1 \\ & X3 (u1\_struct\_0 X1)) \Rightarrow (k1\_bcialg\_1 X1 X2 (k1\_bcialg\_1 X1 X3 X2) = \\ & X2)))) \Rightarrow ((\neg v2\_struct\_0 X0) \wedge ((v3\_bcialg\_1 X0) \wedge ((v4\_bcialg\_1 \\ & X0) \wedge ((v5\_bcialg\_1 X0) \wedge ((v7\_bcialg\_1 X0) \wedge ((v8\_bcialg\_1 X0) \wedge \\ & (l2\_bcialg\_1 X0)))))) \end{aligned} \quad (2)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v3\_bcialg\_1 X0) \wedge ((v4\_bcialg\_1 \\ & X0) \wedge ((v5\_bcialg\_1 X0) \wedge ((v7\_bcialg\_1 X0) \wedge (l2\_bcialg\_1 X0)))))) \Rightarrow \\ & ((\forall X1. ((\neg v2\_struct\_0 X1) \wedge ((v3\_bcialg\_1 X1) \wedge ((v4\_bcialg\_1 \\ & X1) \wedge ((v5\_bcialg\_1 X1) \wedge ((v7\_bcialg\_1 X1) \wedge (l2\_bcialg\_1 X1)))))) \Rightarrow \\ & (\forall X2. (m1\_subset\_1 X2 (u1\_struct\_0 X1)) \Rightarrow (\forall X3. (m1\_subset\_1 \\ & X3 (u1\_struct\_0 X1)) \Rightarrow (k1\_bcialg\_1 X1 X2 (k1\_bcialg\_1 X1 X3 X2) = \\ & X2)))) \Rightarrow (u1\_struct\_0 X0 = k4\_bcialg\_1 X0)) \end{aligned}$$