

t85\_bcialg\_1

(TMd5HBeeMh3YQRRNEjrpVeG7qk9n4MnJXwZ)

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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  $v16\_bcialg\_1 : \iota \Rightarrow o$  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. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v3\_bcialg\_1 X0) \wedge ((v4\_bcialg\_1 \\ & X0) \wedge ((v5\_bcialg\_1 X0) \wedge ((v7\_bcialg\_1 X0) \wedge (l2\_bcialg\_1 X0)))))) \Rightarrow \\ & (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. (m1\_subset\_1 \\ & X2 (u1\_struct\_0 X0)) \Rightarrow ((v16\_bcialg\_1 X0) \Rightarrow (k1\_bcialg\_1 X0 (k1\_bcialg\_1 \\ & X0 X1 (k1\_bcialg\_1 X0 X1 X2)) (k1\_bcialg\_1 X0 X2 X1) = k1\_bcialg\_1 \\ & X0 (k1\_bcialg\_1 X0 (k1\_bcialg\_1 X0 X2 (k1\_bcialg\_1 X0 X2 X1)) (k1\_bcialg\_1 \\ & X0 X2 X1)) (k1\_bcialg\_1 X0 X1 X2)))))) \end{aligned} \tag{1}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v3\_bcialg\_1 X0) \wedge ((v4\_bcialg\_1 \\ & X0) \wedge ((v5\_bcialg\_1 X0) \wedge ((v7\_bcialg\_1 X0) \wedge (l2\_bcialg\_1 X0)))))) \Rightarrow \\ & (((\neg v2\_struct\_0 X0) \wedge ((v3\_bcialg\_1 X0) \wedge ((v4\_bcialg\_1 X0) \wedge (( \\ & v5\_bcialg\_1 X0) \wedge ((v7\_bcialg\_1 X0) \wedge ((v16\_bcialg\_1 X0) \wedge (l2\_bcialg\_1 \\ & X0)))))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (k1\_bcialg\_1 X0 (k1\_bcialg\_1 \\ & X0 X1 (k1\_bcialg\_1 X0 X1 X2)) (k1\_bcialg\_1 X0 X2 X1) = k1\_bcialg\_1 \\ & X0 (k1\_bcialg\_1 X0 (k1\_bcialg\_1 X0 X2 (k1\_bcialg\_1 X0 X2 X1)) (k1\_bcialg\_1 \\ & X0 X2 X1)) (k1\_bcialg\_1 X0 X1 X2)))))) \end{aligned}$$