

## t63\_sheffer2

(TMPn8G59awkr7x1Z55QwUHFYqkkr1P8XHNu)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_sheffer2 : \iota \Rightarrow o$  be given. Let  $l1\_sheffer1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k5\_sheffer1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v1\_sheffer2 X0) \wedge (l1\_sheffer1 \\ & \quad X0))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\ & \quad (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3. (m1\_subset\_1 X3 \\ & \quad (u1\_struct\_0 X0)) \Rightarrow (k5\_sheffer1 X0 X1 (k5\_sheffer1 X0 X2 (k5\_sheffer1 \\ & \quad X0 (k5\_sheffer1 X0 X3 X3) X1)) = k5\_sheffer1 X0 X1 (k5\_sheffer1 X0 \\ & \quad X2 X3)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v1\_sheffer2 X0) \wedge (l1\_sheffer1 \\ & \quad X0))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\ & \quad (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3. (m1\_subset\_1 X3 \\ & \quad (u1\_struct\_0 X0)) \Rightarrow (k5\_sheffer1 X0 (k5\_sheffer1 X0 X1 (k5\_sheffer1 \\ & \quad X0 X2 X2)) (k5\_sheffer1 X0 X1 (k5\_sheffer1 X0 X3 X2)) = k5\_sheffer1 \\ & \quad X0 (k5\_sheffer1 X0 X1 (k5\_sheffer1 X0 X3 X2)) (k5\_sheffer1 X0 X1 ( \\ & \quad k5\_sheffer1 X0 X3 X2)))))) \end{aligned} \tag{2}$$

### Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge ((v1\_sheffer2 X0) \wedge (l1\_sheffer1 \\ & \quad X0))) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (u1\_struct\_0 X0)) \Rightarrow (\forall X2. \\ & \quad (m1\_subset\_1 X2 (u1\_struct\_0 X0)) \Rightarrow (\forall X3. (m1\_subset\_1 X3 \\ & \quad (u1\_struct\_0 X0)) \Rightarrow (k5\_sheffer1 X0 (k5\_sheffer1 X0 X1 (k5\_sheffer1 \\ & \quad X0 X2 X2)) (k5\_sheffer1 X0 X1 (k5\_sheffer1 X0 X3 (k5\_sheffer1 X0 ( \\ & \quad k5\_sheffer1 X0 X2 X2) X1))) = k5\_sheffer1 X0 (k5\_sheffer1 X0 X1 (k5\_sheffer1 \\ & \quad X0 X3 X2)) (k5\_sheffer1 X0 X1 (k5\_sheffer1 X0 X3 X2)))))) \end{aligned}$$