# t5_sheffer2 (TMaUDU9zDfiWTnfroswPsqWqn5auwRX9rpr)

October 27, 2020

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.

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

Assume the following.

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

**Theorem 1**

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v1\_sheffer2\ X0) \wedge (l1\_sheffer1\ X0))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (k5\_sheffer1\ X0\ X1\ (k5\_sheffer1\ X0\ (k5\_sheffer1\ X0\ X1\ X1)\ X1) = k5\_sheffer1\ X0\ X1\ X1))$$