

t50_sheffer2

(TMM8LcCxAJQCCxdjrD23JvxPkBoLnLv1csi)

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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.

$$\begin{aligned}
& \forall X0.((\neg v2_struct.0 X0) \wedge ((v1_sheffer2 X0) \wedge (l1_sheffer1 \\
& \quad X0))) \Rightarrow (\forall X1.(m1_subset.1 X1 (u1_struct.0 X0)) \Rightarrow (\forall X2. \\
& \quad (m1_subset.1 X2 (u1_struct.0 X0)) \Rightarrow (\forall X3.(m1_subset.1 X3 \\
& \quad (u1_struct.0 X0)) \Rightarrow (k5_sheffer1 X0 (k5_sheffer1 X0 (k5_sheffer1 \\
& \quad X0 X1 (k5_sheffer1 X0 X2 X3)) (k5_sheffer1 X0 X1 (k5_sheffer1 X0 X2 \\
& \quad X3))) (k5_sheffer1 X0 X2 X2) = k5_sheffer1 X0 X1 (k5_sheffer1 X0 X2 \\
& \quad X2))))))
\end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((\neg v2_struct.0 X0) \wedge ((v1_sheffer2 X0) \wedge (l1_sheffer1 \\
& \quad X0))) \Rightarrow (\forall X1.(m1_subset.1 X1 (u1_struct.0 X0)) \Rightarrow (\forall X2. \\
& \quad (m1_subset.1 X2 (u1_struct.0 X0)) \Rightarrow (k5_sheffer1 X0 (k5_sheffer1 \\
& \quad X0 X1 (k5_sheffer1 X0 X2 X1)) X2 = k5_sheffer1 X0 X2 X2)))
\end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.\forall X1.\forall X2.(((\neg v2_struct.0 X0) \wedge (l1_sheffer1 \\
& \quad X0)) \wedge ((m1_subset.1 X1 (u1_struct.0 X0)) \wedge (m1_subset.1 X2 (u1_struct.0 \\
& \quad X0)))) \Rightarrow (m1_subset.1 (k5_sheffer1 X0 X1 X2) (u1_struct.0 X0))
\end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned}
& \forall X0.((\neg v2_struct.0 X0) \wedge ((v1_sheffer2 X0) \wedge (l1_sheffer1 \\
& \quad X0))) \Rightarrow (\forall X1.(m1_subset.1 X1 (u1_struct.0 X0)) \Rightarrow (\forall X2. \\
& \quad (m1_subset.1 X2 (u1_struct.0 X0)) \Rightarrow (\forall X3.(m1_subset.1 X3 \\
& \quad (u1_struct.0 X0)) \Rightarrow (k5_sheffer1 X0 (k5_sheffer1 X0 (k5_sheffer1 \\
& \quad X0 (k5_sheffer1 X0 X1 X2) (k5_sheffer1 X0 X1 X2)) (k5_sheffer1 X0 \\
& \quad (k5_sheffer1 X0 X3 (k5_sheffer1 X0 (k5_sheffer1 X0 X1 X2) X3)) (k5_sheffer1 \\
& \quad X0 X1 X2))) (k5_sheffer1 X0 X1 X1) = k5_sheffer1 X0 (k5_sheffer1 X0 \\
& \quad X3 (k5_sheffer1 X0 (k5_sheffer1 X0 X1 X2) X3)) (k5_sheffer1 X0 X1 \\
& \quad X1))))))
\end{aligned}$$