

t4_sheffer1 (TM- GaXtFG4cUk9DPvADtHLCUw5jQ4Gndcbws)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v4_lattices : \iota \Rightarrow o$ be given. Let $v6_lattices : \iota \Rightarrow o$ be given. Let $v11_lattices : \iota \Rightarrow o$ be given. Let $v7_robbins1 : \iota \Rightarrow o$ be given. Let $v1_sheffer1 : \iota \Rightarrow o$ be given. Let $v3_sheffer1 : \iota \Rightarrow o$ be given. Let $v4_sheffer1 : \iota \Rightarrow o$ be given. Let $l3_lattices : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k3_lattices : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_sheffer1 : \iota \Rightarrow \iota$ be given. Let $k3_sheffer1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l2_lattices : \iota \Rightarrow o$ be given. Let $k1_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $l1_lattices : \iota \Rightarrow o$ be given. Let $k2_lattices : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v4_lattices X0) \wedge ((v6_lattices \\ & X0) \wedge ((v11_lattices X0) \wedge ((v1_sheffer1 X0) \wedge ((v3_sheffer1 X0) \wedge \\ & ((v4_sheffer1 X0) \wedge (l3_lattices X0))))))) \Rightarrow (\forall X1.(m1_subset_1 \\ & X1 (u1_struct_0 X0)) \Rightarrow (k3_lattices X0 X1 (k3_sheffer1 X0 X1) = k1_sheffer1 \\ & X0)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (((\neg v2_struct_0 X0) \wedge ((v4_lattices \\ & X0) \wedge (l2_lattices X0))) \wedge ((m1_subset_1 X1 (u1_struct_0 X0)) \wedge (\\ & m1_subset_1 X2 (u1_struct_0 X0)))) \Rightarrow (k3_lattices X0 X1 X2 = k1_lattices \\ & X0 X1 X2) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0.(l3_lattices X0) \Rightarrow ((l1_lattices X0) \wedge (l2_lattices X0)) \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge (l3_lattices X0)) \wedge \\ & (m1_subset_1 X1 (u1_struct_0 X0))) \Rightarrow (m1_subset_1 (k3_sheffer1 \\ & X0 X1) (u1_struct_0 X0)) \end{aligned} \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2_struct_0 X0)\wedge((v4_lattices X0)\wedge(l2_lattices X0)))\wedge((m1_subset_1 X1 (u1_struct_0 X0))\wedge(m1_subset_1 X2 (u1_struct_0 X0))))\Rightarrow(m1_subset_1 (k3_lattices X0 X1 X2) (u1_struct_0 X0)) \quad (5)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l3_lattices X0))\Rightarrow(m1_subset_1 (k1_sheffer1 X0) (u1_struct_0 X0)) \quad (6)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l3_lattices X0))\Rightarrow((v3_sheffer1 X0)\Leftrightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow(\forall X2.(m1_subset_1 X2 (u1_struct_0 X0))\Rightarrow(\forall X3.(m1_subset_1 X3 (u1_struct_0 X0))\Rightarrow(k1_lattices X0 X1 (k2_lattices X0 X2 X3) = k2_lattices X0 (k1_lattices X0 X1 X2) (k1_lattices X0 X1 X3)))))) \quad (7)$$

Assume the following.

$$\forall X0.((\neg v2_struct_0 X0)\wedge(l3_lattices X0))\Rightarrow((v1_sheffer1 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow((X1 = k1_sheffer1 X0)\Leftrightarrow(\forall X2.(m1_subset_1 X2 (u1_struct_0 X0))\Rightarrow((k2_lattices X0 X1 X2 = X2)\wedge(k2_lattices X0 X2 X1 = X2)))))) \quad (8)$$

Theorem 1

$$\forall X0.((\neg v2_struct_0 X0)\wedge((v4_lattices X0)\wedge((v6_lattices X0)\wedge((v11_lattices X0)\wedge((v7_robbins1 X0)\wedge((v1_sheffer1 X0)\wedge((v3_sheffer1 X0)\wedge((v4_sheffer1 X0)\wedge(l3_lattices X0))))))))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow(k3_lattices X0 X1 (k1_sheffer1 X0) = k1_sheffer1 X0))$$