t32_sheffer1 (TMG7hHYKkmHoASN4pheiZS2Fu9AYfPcUFcr)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v9\_sheffer1 : \iota \Rightarrow o$ be given. Let $v10\_sheffer1 : \iota \Rightarrow o$ be given. Let $v11\_sheffer1 : \iota \Rightarrow o$ be given. Let $v12\_sheffer1 : \iota \Rightarrow o$ be given. Let $l3\_sheffer1 : \iota \Rightarrow o$ 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. Let $l1\_sheffer1 : \iota \Rightarrow o$ be given. Let $l4\_robbins1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v9\_sheffer1\ X0) \wedge ((v10\_sheffer1\ X0) \wedge ((v11\_sheffer1\ X0) \wedge ((v12\_sheffer1\ X0) \wedge (l3\_sheffer1\ X0)))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (k5\_sheffer1\ X0\ X1\ X2 = k5\_sheffer1\ X0\ X2\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.(l3\_sheffer1\ X0) \Rightarrow ((l1\_sheffer1\ X0) \wedge (l4\_robbins1\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0\ X0) \wedge (l1\_sheffer1\ X0)) \wedge ((m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \wedge (m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)))) \Rightarrow (m1\_subset\_1\ (k5\_sheffer1\ X0\ X1\ X2)\ (u1\_struct\_0\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_sheffer1\ X0)) \Rightarrow ((v11\_sheffer1\ X0) \Leftrightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (k5\_sheffer1\ X0\ X1\ (k5\_sheffer1\ X0\ X2\ (k5\_sheffer1\ X0\ X2\ X2)) = k5\_sheffer1\ X0\ X1\ X1)))) \tag{4}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_sheffer1\ X0)) \Rightarrow ((v10\_sheffer1\ X0) \Leftrightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (k5\_sheffer1\ X0\ (k5\_sheffer1\ X0\ X1\ X1)\ (k5\_sheffer1\ X0\ X1\ X1) = X1))) \tag{5}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v9\_sheffer1\ X0)\wedge((v10\_sheffer1\ X0)\wedge((v11\_sheffer1\ X0)\wedge((v12\_sheffer1\ X0)\wedge(l3\_sheffer1\ X0))))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow(k5\_sheffer1\ X0\ X1\ (k5\_sheffer1\ X0\ X1\ X1) = k5\_sheffer1\ X0\ X2\ (k5\_sheffer1\ X0\ X2\ X2))))$$