

t121_member_1
(TMNv5iDmpNU5nyEtY8iBrveACVkeE2rEq2qK)

October 27, 2020

Let $v1_membered : \iota \Rightarrow o$ be given. Let $k15_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_member_1 : \iota \Rightarrow \iota$ be given. Let $k13_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_member_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (\forall X1.(v1_membered X1) \Rightarrow (k13_member_1 X0 (k5_member_1 X1) = k5_member_1 (k13_member_1 X0 X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (v1_membered (k7_member_1 X0)) \quad (2)$$

Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (v1_membered (k5_member_1 X0)) \quad (3)$$

Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (\forall X1.(v1_membered X1) \Rightarrow (k15_member_1 X0 X1 = k13_member_1 X0 (k7_member_1 X1))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_membered X0) \wedge (v1_membered X1)) \Rightarrow (k13_member_1 X0 X1 = k13_member_1 X1 X0) \quad (5)$$

Theorem 1

$$\forall X0.(v1_membered X0) \Rightarrow (\forall X1.(v1_membered X1) \Rightarrow (k15_member_1 (k5_member_1 X0) X1 = k5_member_1 (k15_member_1 X0 X1)))$$