

t8_chain_1

(TMYuKK3ghGRg7GyKzixME1BFqFCDmX3JdU5)

October 27, 2020

Let $v1_finset.1 : \iota \Rightarrow o$ be given. Let $v1_abian : \iota \Rightarrow o$ be given. Let $k5_card.1 : \iota \Rightarrow \iota$ be given. Let $k5_xboole.0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xboole.0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_xboole.0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xboole.0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole.0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. r1_xboole.0 (k3_xboole.0 X0 X1) (k4_xboole.0 X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. r1_xboole.0 (k4_xboole.0 X0 X1) (k4_xboole.0 X1 X0) \quad (2)$$

Assume the following.

$$\forall X0. (v1_finset.1 X0) \Rightarrow (\forall X1. (v1_finset.1 X1) \Rightarrow ((r1_xboole.0 X0 X1) \Rightarrow (((v1_abian (k5_card.1 X0)) \Leftrightarrow (v1_abian (k5_card.1 X1))) \Leftrightarrow (v1_abian (k5_card.1 (k2_xboole.0 X0 X1))))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k2_xboole.0 (k3_xboole.0 X0 X1) (k4_xboole.0 X0 X1) = X0 \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. (v1_finset.1 X0) \Rightarrow (v1_finset.1 (k4_xboole.0 X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (v1_finset.1 X1) \Rightarrow (v1_finset.1 (k3_xboole.0 X0 X1)) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. k5_xboole.0 X0 X1 = k2_xboole.0 (k4_xboole.0 X0 X1) (k4_xboole.0 X1 X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.k3_xboole_0 X0 X1 = k3_xboole_0 X1 X0 \quad (8)$$

Theorem 1

$$\forall X0.(v1_finset_1 X0) \Rightarrow (\forall X1.(v1_finset_1 X1) \Rightarrow ((v1_abian (k5_card_1 X0)) \Leftrightarrow (v1_abian (k5_card_1 X1))) \Leftrightarrow (v1_abian (k5_card_1 (k5_xboole_0 X0 X1))))$$