

t11_finsub_1
(TMZry21sR6ckDisq2qW9z5UVj79rqto7vEd)

October 27, 2020

Let $k5_finsub_1 : \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_finsub_1 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1_tarSKI X0 X1) \wedge (r1_tarSKI X0 X2)) \Rightarrow (r1_tarSKI X0 (k3_xboole_0 X1 X2)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarSKI (k3_xboole_0 X0 X1) X0 \quad (2)$$

Assume the following.

$$\forall X0. v4_finsub_1 (k5_finsub_1 X0) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (v4_finsub_1 X1) \Rightarrow ((X1 = k5_finsub_1 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow ((r1_tarSKI X2 X0) \wedge (v1_finset_1 X2)))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k3_xboole_0 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 \in X0) \wedge (X3 \in X1))) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarSKI X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. k3_xboole_0 X0 X1 = k3_xboole_0 X1 X0 \quad (7)$$

Theorem 1

$$\forall X0. \forall X1. k5_finsub_1 (k3_xboole_0 X0 X1) = k3_xboole_0 (k5_finsub_1 X0) (k5_finsub_1 X1)$$