

t19_card_3
(TMcPG5QVJb7RUn6CaJBTtu9oTJfU7nory7q)

October 27, 2020

Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_card_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. r1_tarski (k6_subset_1 (k5_card_3 X1 X0) (k5_card_3 X1 X2)) (k5_card_3 X1 (k6_subset_1 X0 X2)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k5_card_3 X2 (k2_xboole_0 X0 X1) = k2_xboole_0 (k5_card_3 X2 X0) (k5_card_3 X2 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. \forall X3. ((r1_tarski X0 X1) \wedge (r1_tarski X2 X3)) \Rightarrow (r1_tarski (k2_xboole_0 X0 X2) (k2_xboole_0 X1 X3)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. k5_xboole_0 X0 X1 = k2_xboole_0 (k4_xboole_0 X0 X1) (k4_xboole_0 X1 X0) \quad (5)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. r1_tarski (k5_xboole_0 (k5_card_3 X1 X0) (k5_card_3 X1 X2)) (k5_card_3 X1 (k5_xboole_0 X0 X2))$$