

t197_xxreal_1
(TMGs4CoDTL4PM9pPfzVfZZ7b13dQp97HZzz)

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Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\forall X0. \forall X1. k2_xboole_0 X0 X1 = k5_xboole_0 X0 (k4_xboole_0 X1 X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k4_xboole_0 X0 (k2_xboole_0 X0 X1) = k1_xboole_0 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k4_xboole_0 (k4_xboole_0 X0 X1) X2 = k4_xboole_0 X0 (k2_xboole_0 X1 X2) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (k4_xboole_0 X0 X1 = k1_xboole_0) \Leftrightarrow (r1_tarski X0 X1) \quad (4)$$

Assume the following.

$$\forall X0. (v1_xxreal_0 X0) \Rightarrow (\forall X1. (v1_xxreal_0 X1) \Rightarrow (\forall X2. (v1_xxreal_0 X2) \Rightarrow (((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X2)) \Rightarrow (r1_xxreal_0 X0 X2)))) \quad (5)$$

Assume the following.

$$\forall X0. (v1_xxreal_0 X0) \Rightarrow (\forall X1. (v1_xxreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \Rightarrow (k4_xxreal_1 X1 X0 = k1_xboole_0))) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \Rightarrow (k3_xxreal_1 X1 X0 = k1_xboole_0))) \quad (7)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2.(v1_xxreal_0 X2) \Rightarrow ((\neg r1_xxreal_0 X1 X0) \Rightarrow (k6_subset_1 (k3_xxreal_1 X2 X1) (k3_xxreal_1 X0 X1) = k3_xxreal_1 X2 X0)))) \quad (8)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\neg r1_xxreal_0 X1 X0) \Rightarrow (k6_subset_1 (k3_xxreal_1 X0 X1) (k1_tarski X1) = k4_xxreal_1 X0 X1))) \quad (9)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((\neg r1_xxreal_0 X1 X0) \Rightarrow (k3_xxreal_1 X0 X1 = k2_xboole_0 (k4_xxreal_1 X0 X1) (k1_tarski X1)))) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.r1_tarski X0 X0 \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (12)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow ((r1_xxreal_0 X0 X1) \vee (r1_xxreal_0 X1 X0)) \quad (14)$$

Assume the following.

$$\forall X0.\forall X1.k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \quad (15)$$

Theorem 1

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2.(v1_xxreal_0 X2) \Rightarrow ((\neg r1_xxreal_0 X1 X0) \Rightarrow (k6_subset_1 (k4_xxreal_1 X2 X1) (k4_xxreal_1 X0 X1) = k3_xxreal_1 X2 X0))))$$