

t50_xxreal_2 (TM-
LZo296hNufWaT5D9CbsKFkB8PnN95DFUc)

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Let $v2_membered : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v3_xxreal_2 : \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $m2_xxreal_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg(X0 \neq k1_tarski X1) \wedge ((X0 \neq k1_xboole_0) \wedge (\forall X2. \neg(X2 \in X0) \wedge (X2 \neq X1))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. (v1_xxreal_0 X0) \Rightarrow (\forall X1. (v1_xxreal_0 X1) \Rightarrow (\neg (X0 \in k1_numbers) \wedge ((r1_xxreal_0 X0 X1) \wedge ((\neg X1 \in k1_numbers) \wedge (X1 \neq k1_xxreal_0)))))) \quad (3)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (4)$$

Assume the following.

$$\forall X0. (v2_membered X0) \Rightarrow ((v3_xxreal_2 X0) \Leftrightarrow (\exists X1. (v1_xreal_0 X1) \wedge (m2_xxreal_2 X1 X0))) \quad (5)$$

Assume the following.

$$\forall X0. (v2_membered X0) \Rightarrow (\forall X1. (v1_xxreal_0 X1) \Rightarrow ((m2_xxreal_2 X1 X0) \Leftrightarrow (\forall X2. (v1_xxreal_0 X2) \Rightarrow ((X2 \in X0) \Rightarrow (r1_xxreal_0 X1 X2))))) \quad (6)$$

Assume the following.

$$k1_xreal_0 = k1_numbers \quad (7)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Leftrightarrow (X0 \in k1_numbers) \quad (8)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xreal_0 X0) \quad (9)$$

Assume the following.

$$\forall X0.(v2_membered X0) \Rightarrow (\forall X1.(m1_subset_1 X1 X0) \Rightarrow (v1_xreal_0 X1)) \quad (10)$$

Theorem 1

$$\forall X0.((v2_membered X0) \wedge ((\neg v1_xboole_0 X0) \wedge (v3_xreal_2 X0))) \Rightarrow (\neg (X0 \neq k1_tarski k1_xreal_0) \wedge (\forall X1.(m1_subset_1 X1 k1_numbers) \Rightarrow (\neg X1 \in X0)))$$