

t94_xxreal_2 (TMK-
txaRF8LrdUtVqKSEu3aAEpXRTk5SgMXq)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k7_numbers : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xxreal_2 : \iota \Rightarrow \iota$ be given. Let $v2_membered : \iota \Rightarrow o$ be given. Let $m1_xxreal_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 X2))) \Rightarrow (m1_subset_1 X0 X2) \quad (1)$$

Assume the following.

$$\forall X0. (v2_membered X0) \Rightarrow (v1_xxreal_0 (k1_xxreal_2 X0)) \quad (2)$$

Assume the following.

$$\forall X0. (v2_membered X0) \Rightarrow (\forall X1. (v1_xxreal_0 X1) \Rightarrow ((X1 = k1_xxreal_2 X0) \Leftrightarrow ((m1_xxreal_2 X1 X0) \wedge (\forall X2. (m1_xxreal_2 X2 X0) \Rightarrow (r1_xxreal_0 X1 X2)))))) \quad (3)$$

Assume the following.

$$\forall X0. (v2_membered X0) \Rightarrow (\forall X1. (v1_xxreal_0 X1) \Rightarrow ((m1_xxreal_2 X1 X0) \Leftrightarrow (\forall X2. (v1_xxreal_0 X2) \Rightarrow ((X2 \in X0) \Rightarrow (r1_xxreal_0 X2 X1)))))) \quad (4)$$

Assume the following.

$$\forall X0. (m1_subset_1 X0 (k1_zfmisc_1 k7_numbers)) \Rightarrow (v2_membered X0) \quad (5)$$

Theorem 1

$$\forall X0. ((\neg v1_xboole_0 X0) \wedge (m1_subset_1 X0 (k1_zfmisc_1 k7_numbers))) \Rightarrow (\forall X1. (v1_xxreal_0 X1) \Rightarrow (\neg (\neg r1_xxreal_0 (k1_xxreal_2 X0) X1) \wedge (\forall X2. (m1_subset_1 X2 k7_numbers) \Rightarrow (\neg (X2 \in X0) \wedge (\neg r1_xxreal_0 X2 X1))))))$$