

t19_xxreal_1

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Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k3_xxreal_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_numbers : \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (2)$$

Assume the following.

$$\forall X0.\exists X1.m1_subset_1 X1 X0 \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (k3_xxreal_1 \\ X0 X1 = \text{ReplSep}(\text{toset}(\lambda X2 : \iota.m1_subset_1 X2 k7_numbers)) \\ (\lambda X2 : \iota.(\neg r1_xxreal_0 X2 X0) \wedge (r1_xxreal_0 X2 X1)) (\lambda X2 : \\ \iota.X2)))) \quad (4) \end{aligned}$$

Theorem 1 $\forall X0.(v1_xxreal_0 X0) \Rightarrow (k3_xxreal_1 X0 X0 = k1_xboole_0)$.