

t55_member_1 (TMVhmJRayLyKHPvWphvh- DuKuT7FfgDW15D7)

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Let $v2_membered : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k3_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v2_membered X1) \Rightarrow (k10_member_1 \\ X0 X1 = ReplSep2 (toset (\lambda X2 : \iota.m1_subset_1 X2 k7_numbers)) \\ (\lambda X2 : \iota.toset (\lambda X3 : \iota.m1_subset_1 X3 k7_numbers)) (\\ \lambda X2 : \iota.\lambda X3 : \iota.(X2 \in X0) \wedge (X3 \in X1)) (\lambda X2 : \iota.\lambda X3 : \\ \iota.k3_xxreal_3 X2 X3))) \end{aligned} \quad (1)$$

Assume the following.

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

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Leftrightarrow (X0 \in k7_numbers) \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0.(v2_membered X0) \Rightarrow (\forall X1.(v2_membered X1) \Rightarrow (\forall X2. \\ (v1_xxreal_0 X2) \Rightarrow (\forall X3.(v1_xxreal_0 X3) \Rightarrow (((X2 \in X0) \wedge (X3 \in \\ X1)) \Rightarrow (k3_xxreal_3 X2 X3 \in k10_member_1 X0 X1)))))) \end{aligned}$$