

t113\_seq\_4  
(TMFtHW8bZ7CEGHMvmRhMa5vy9tnqxumWFge)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $r1\_xreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k5\_seq\_4 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v3\_membered : \iota \Rightarrow o$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Let  $k3\_seq\_4 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \neg(X0 \neq k1\_xboole\_0) \wedge (\forall X1. \neg X1 \in X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \neg(X0 \in X1) \wedge (v1\_xboole\_0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X2))) \Rightarrow (m1\_subset\_1 X0 X2) \quad (3)$$

Assume the following.

$$\forall X0. ((\neg v1\_xboole\_0 X0) \wedge (v3\_membered X0)) \Rightarrow (\forall X1. (v1\_xreal\_0 X1) \Rightarrow ((\forall X2. (v1\_xreal\_0 X2) \Rightarrow ((X2 \in X0) \Rightarrow (r1\_xreal\_0 X1 X2)))) \Rightarrow (r1\_xreal\_0 X1 (k3\_seq\_4 X0))) \quad (4)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers)) \Rightarrow (k5\_seq\_4 X0 = k3\_seq\_4 X0) \quad (5)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers)) \Rightarrow (v3\_membered X0) \quad (6)$$

Assume the following.

$$\forall X0. (m1\_subset\_1 X0 k1\_numbers) \Rightarrow (v1\_xreal\_0 X0) \quad (7)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 (k1\_zfmisc\_1 k1\_numbers)) \Rightarrow (\forall X1. \\ & (m1\_subset\_1 X1 k1\_numbers) \Rightarrow ((\forall X2.(m1\_subset\_1 X2 k1\_numbers) \Rightarrow \\ & ((X2 \in X0) \Rightarrow (r1\_xxreal\_0 X1 X2))) \Rightarrow ((X0 = k1\_xboole\_0) \vee (r1\_xxreal\_0 \\ & X1 (k5\_seq\_4 X0)))))) \end{aligned}$$