# t106_seq_4 (TMWhXga7mkWQfTc9fchU2UP2JZAvwqEkPhQ)

October 27, 2020

Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k14\_seq\_4 : \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v1\_seq\_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m2\_finseq\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_numbers : \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $k22\_seq\_4 : \iota \Rightarrow \iota$ be given. Let $k15\_seq\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\neg(X0 \in X1) \wedge (v1\_xboole\_0\ X1) \tag{1}$$

Assume the following.

$$v1\_xboole\_0\ k1\_xboole\_0 \tag{2}$$

Assume the following.

$$\forall X0.(m2\_subset\_1\ X0\ k1\_numbers\ k5\_numbers) \Rightarrow (\forall X1.\ (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k14\_seq\_4\ X0))) \Rightarrow ((v1\_seq\_4\ X1\ X0) \Leftrightarrow (\forall X2.(m2\_finseq\_2\ X2\ k2\_numbers\ (k14\_seq\_4\ X0)) \Rightarrow (\neg(X2 \in X1) \wedge (\forall X3.(m1\_subset\_1\ X3\ k1\_numbers) \Rightarrow (\neg(\neg r1\_xxreal\_0\ X3\ k6\_numbers) \wedge (\forall X4.(m2\_finseq\_2\ X4\ k2\_numbers\ (k14\_seq\_4\ X0)) \Rightarrow ((\neg r1\_xxreal\_0\ X3\ (k22\_seq\_4\ X4)) \Rightarrow (k15\_seq\_4\ X0\ X2\ X4 \in X1)))))))))) \tag{3}$$

**Theorem 1**

$$\forall X0.(m2\_subset\_1\ X0\ k1\_numbers\ k5\_numbers) \Rightarrow (\forall X1.\ (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k14\_seq\_4\ X0))) \Rightarrow ((X1 = k1\_xboole\_0) \Rightarrow (v1\_seq\_4\ X1\ X0)))$$