

t19\_trees\_2  
(TMT29YrQZeqi641y3Lx8JZ9PgjEcR92zwxH)

October 27, 2020

Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_trees\_1 : \iota \Rightarrow o$  be given. Let  $m1\_trees\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $r3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. \neg(X0 \in X1) \wedge (v1\_xboole\_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (2)$$

Assume the following.

$$\forall X0. \exists X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \wedge (v1\_xboole\_0 X1) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. ((\neg v1\_xboole\_0 X0) \wedge (v1\_trees\_1 X0)) \Rightarrow (\forall X1. \\ (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow ((m1\_trees\_2 X1 X0) \Leftrightarrow (\forall X2. \\ (m2\_finseq\_1 X2 k5\_numbers) \Rightarrow (\forall X3. (m2\_finseq\_1 X3 k5\_numbers) \Rightarrow \\ (((X2 \in X1) \wedge (X3 \in X1)) \Rightarrow (r3\_xboole\_0 X2 X3)))))) \end{aligned} \quad (4)$$

Assume the following.

$$k1\_xboole\_0 = the (\lambda X0 : \iota. v1\_xboole\_0 X0) \quad (5)$$

**Theorem 1**

$$\forall X0. ((\neg v1\_xboole\_0 X0) \wedge (v1\_trees\_1 X0)) \Rightarrow (m1\_trees\_2 k1\_xboole\_0 X0)$$