

t26\_trees\_1  
(TMF5hao75dzuRc7G2gVEiBkNrVGk1wVisFT)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Let  $v1\_trees\_1 : \iota \Rightarrow o$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. ((v1\_finset\_1 X0) \wedge (v1\_finset\_1 X1)) \Rightarrow (v1\_finset\_1 (k2\_xboole\_0 X0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (\neg v1\_xboole\_0 X0) \Rightarrow (\neg v1\_xboole\_0 (k2\_xboole\_0 X0 X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (((\neg v1\_xboole\_0 X0) \wedge (v1\_trees\_1 X0)) \wedge ((\neg v1\_xboole\_0 X1) \wedge (v1\_trees\_1 X1))) \Rightarrow (v1\_trees\_1 (k2\_xboole\_0 X0 X1)) \quad (3)$$

**Theorem 1**

$$\forall X0. ((\neg v1\_xboole\_0 X0) \wedge ((v1\_finset\_1 X0) \wedge (v1\_trees\_1 X0))) \Rightarrow (\forall X1. ((\neg v1\_xboole\_0 X1) \wedge ((v1\_finset\_1 X1) \wedge (v1\_trees\_1 X1)))) \Rightarrow ((\neg v1\_xboole\_0 (k2\_xboole\_0 X0 X1)) \wedge ((v1\_finset\_1 (k2\_xboole\_0 X0 X1)) \wedge (v1\_trees\_1 (k2\_xboole\_0 X0 X1))))$$