

t3\_trees\_4  
(TMGuJ1JE8FTVSJMxqjni6YnCmYz976K4cGu)

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Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_trees\_4 : \iota \Rightarrow \iota$  be given. Let  $k2\_trees\_1 : \iota \Rightarrow \iota$  be given. Let  $k6\_numbers : \iota$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k2\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k10\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k7\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (X1 \in X0) \Rightarrow (k1\_funct\_1 (k2\_funcop\_1 X0 X2) X1 = X2) \quad (1)$$

Assume the following.

$$k2\_trees\_1 k6\_numbers = k1\_tarski k1\_xboole\_0 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (k9\_xtuple\_0 (k2\_funcop\_1 X0 X1) = X0) \wedge (r1\_tarski (k10\_xtuple\_0 (k2\_funcop\_1 X0 X1)) (k1\_tarski X1)) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k7\_funcop\_1 X0 X1 = k2\_funcop\_1 X0 X1 \quad (4)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (5)$$

Assume the following.

$$\forall X0. k1\_trees\_4 X0 = k7\_funcop\_1 (k2\_trees\_1 k6\_numbers) X0 \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (X1 = k1\_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (X2 = X0)) \quad (7)$$

**Theorem 1**

$$\forall X0. (k9\_xtuple\_0 (k1\_trees\_4 X0) = k2\_trees\_1 k6\_numbers) \wedge (k1\_funct\_1 (k1\_trees\_4 X0) k1\_xboole\_0 = X0)$$