

t63\_trees\_3 (TMZcocHm-  
BKEwVCRoCR7hXRGbaSPBD7y1QEr)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v1\_trees\_1 : \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k12\_trees\_3 : \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finseq\_1 : \iota \Rightarrow o$  be given. Let  $k7\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k12\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k6\_numbers : \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_trees\_1 X0)) \Rightarrow (\forall X1. \\ & (X1 \in k12\_trees\_3 X0) \Leftrightarrow (\neg (X1 \neq k1\_xboole\_0) \wedge (\forall X2.((v1\_relat\_1 \\ & X2) \wedge ((v1\_funct\_1 X2) \wedge (v1\_finseq\_1 X2))) \Rightarrow (\neg (X2 \in X0) \wedge (X1 = k7\_finseq\_1 \\ & (k12\_finseq\_1 k5\_numbers k6\_numbers) X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \tag{2}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_trees\_1 X0)) \Rightarrow (\forall X1. \\ & ((\neg v1\_xboole\_0 X1) \wedge (v1\_trees\_1 X1)) \Rightarrow ((r1\_tarski X0 X1) \Rightarrow (r1\_tarski \\ & (k12\_trees\_3 X0) (k12\_trees\_3 X1)))) \end{aligned}$$