t9_trees_9 (TMMoRuYhmKyus-GhdFBe57iAg89mwCnxhFkg)

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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 $m1\_trees\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_trees\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_trees\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge ((v1\_finset\_1\ X0) \wedge (v1\_trees\_1\ X0))) \Rightarrow (\forall X1.(m1\_trees\_1\ X1\ X0) \Rightarrow (\neg (X1 \neq k1\_xboole\_0) \wedge (r1\_xxreal\_0\ (k6\_trees\_1\ X0)\ (k6\_trees\_1\ (k4\_trees\_1\ X0\ X1))))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge ((v1\_finset\_1\ X0) \wedge (v1\_trees\_1\ X0))) \Rightarrow (\forall X1.(m1\_trees\_1\ X1\ X0) \Rightarrow (r1\_xxreal\_0\ (k6\_trees\_1\ (k4\_trees\_1\ X0\ X1))\ (k6\_trees\_1\ X0))) \tag{2}$$

Theorem 1

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge ((v1\_finset\_1\ X0) \wedge (v1\_trees\_1\ X0))) \Rightarrow (\forall X1.(m1\_trees\_1\ X1\ X0) \Rightarrow ((X0 = k4\_trees\_1\ X0\ X1) \Rightarrow (X1 = k1\_xboole\_0)))$$