t15_trees_9 (TMKzvFnMU6xb6QM1668wY9iH5hS5C7vDz1c)

October 27, 2020

Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v3\_trees\_2 : \iota \Rightarrow o$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k6\_trees\_9 : \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_trees\_1 : \iota \Rightarrow o$ be given. Let $k6\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $k5\_trees\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_trees\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge (v1\_trees\_1\ X0)) \Rightarrow ((k1\_xboole\_0 \in X0) \wedge (k6\_finseq\_1\ k5\_numbers \in X0)) \tag{2}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v3\_trees\_2\ X0))) \Rightarrow (k5\_trees\_2\ X0\ (k6\_finseq\_1\ k5\_numbers) = X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1\ X0\ X1) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X1) \wedge ((v1\_funct\_1\ X1) \wedge (v3\_trees\_2\ X1))) \Rightarrow ((X0 \in k6\_trees\_9\ X1) \Leftrightarrow (\exists X2.(m1\_trees\_1\ X2\ (k9\_xtuple\_0\ X1)) \wedge (X0 = k4\_tarski\ X2\ (k5\_trees\_2\ X1\ X2)))) \tag{5}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0) \wedge (v1\_trees\_1\ X0)) \Rightarrow (\forall X1.\ (m1\_trees\_1\ X1\ X0) \Leftrightarrow (m1\_subset\_1\ X1\ X0)) \tag{6}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{7}$$

Assume the following.

$$\forall X0.v1\_xboole\_0\ (k6\_finseq\_1\ X0) \tag{8}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow ((v3\_trees\_2\ X0) \Leftrightarrow ((\neg v1\_xboole\_0\ (k9\_xtuple\_0\ X0)) \wedge (v1\_trees\_1\ (k9\_xtuple\_0\ X0)))) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.k4\_tarski\ X0\ X1 = k2\_tarski\ (k2\_tarski\ X0\ X1)\ (k1\_tarski\ X0) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski\ X0\ X1 = k2\_tarski\ X1\ X0 \tag{11}$$

Theorem 1

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v3\_trees\_2\ X0))) \Rightarrow (k4\_tarski\ k1\_xboole\_0\ X0 \in k6\_trees\_9\ X0)$$