t45_xtuple_0 (TMZmz6EoKqCsZWXsGDyb4X5cS8GdA5hDQkt)

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Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k14\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k11\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k5\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1) \Rightarrow (r1\_tarski\ (k10\_xtuple\_0\ X0)\ (k10\_xtuple\_0\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ (k4\_xboole\_0\ (k11\_xtuple\_0\ X0)\ (k11\_xtuple\_0\ X1))\ (k11\_xtuple\_0\ (k4\_xboole\_0\ X0\ X1)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ (k4\_xboole\_0\ (k10\_xtuple\_0\ X0)\ (k10\_xtuple\_0\ X1))\ (k10\_xtuple\_0\ (k4\_xboole\_0\ X0\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1\_tarski\ X0\ X1) \wedge (r1\_tarski\ X1\ X2)) \Rightarrow (r1\_tarski\ X0\ X2) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.k4\_xboole\_0\ X0\ X1 = k5\_xboole\_0\ X0\ (k3\_xboole\_0\ X0\ X1) \tag{5}$$

Assume the following.

$$\forall X0.k14\_xtuple\_0\ X0 = k10\_xtuple\_0\ (k11\_xtuple\_0\ X0) \tag{6}$$

Assume the following.

$$\forall X0.k11\_xtuple\_0\ X0 = k9\_xtuple\_0\ (k9\_xtuple\_0\ X0) \tag{7}$$

Theorem 1

$$\forall X0.\forall X1.r1\_tarski\ (k4\_xboole\_0\ (k14\_xtuple\_0\ X0)\ (k14\_xtuple\_0\ X1))\ (k14\_xtuple\_0\ (k4\_xboole\_0\ X0\ X1))$$