t128_xboolean (TMJG5Ef6rua1cVUHY3Njq5egrf3ktoEWpdD)

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Let $v1\_xboolean : \iota \Rightarrow o$ be given. Let $k7\_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xboolean : \iota$ be given. Let $k10\_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_xboolean : \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Assume the following.

$$\forall X0.(v1\_xboolean\ X0) \Rightarrow (\forall X1.(v1\_xboolean\ X1) \Rightarrow (k10\_xboolean\ (k3\_xboolean\ X0)\ (k7\_xboolean\ X0\ X1) = X1)) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xboolean\ X0) \Rightarrow (k7\_xboolean\ X0\ X0 = k2\_xboolean) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xboolean\ X0) \wedge (v1\_xboolean\ X1)) \Rightarrow (v1\_xboolean\ (k7\_xboolean\ X0\ X1)) \tag{3}$$

Assume the following.

$$k2\_xboolean = np\_\_1 \tag{4}$$

Theorem 1

$$\forall X0.(v1\_xboolean\ X0) \Rightarrow (\forall X1.(v1\_xboolean\ X1) \Rightarrow (\forall X2.(v1\_xboolean\ X2) \Rightarrow (\forall X3.(v1\_xboolean\ X3) \Rightarrow (((k7\_xboolean\ X0\ X1 = k2\_xboolean) \wedge (k7\_xboolean\ X2\ X3 = k2\_xboolean)) \Rightarrow (k7\_xboolean\ (k7\_xboolean\ X0\ X2)\ (k7\_xboolean\ X1\ X3) = k2\_xboolean)))))$$