

t31\_xboolean  
(TMKWd22YbFE8XnK7RuRKXq55zfcycBgqhhq)

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Let  $v1\_xboolean : \iota \Rightarrow o$  be given. Let  $k9\_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xboolean : \iota \Rightarrow \iota$  be given. Let  $k5\_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. ((v1\_xboolean X0) \wedge (v1\_xboolean X1)) \Rightarrow (k5\_xboolean X0 X0 = X0) \quad (1)$$

Assume the following.

$$\forall X0. (v1\_xboolean X0) \Rightarrow (\forall X1. (v1\_xboolean X1) \Rightarrow (k9\_xboolean X0 X1 = k3\_xboolean (k5\_xboolean X0 X1))) \quad (2)$$

**Theorem 1**  $\forall X0. (v1\_xboolean X0) \Rightarrow (k9\_xboolean X0 X0 = k3\_xboolean X0)$ .