

t4_xboolean (TMdeKBuSFqKyzNbVH- NvVp6GxCao3FBQHQvL)

October 27, 2020

Let $v1_xboolean : \iota \Rightarrow o$ be given. Let $k5_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboolean : \iota$ be given. Let $k2_xboolean : \iota$ be given. Let $np_1 : \iota$ be given. Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (k5_xboolean X0 X0 = X0) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xboolean X0) \wedge (v1_xboolean X1)) \Rightarrow (v1_xboolean (k5_xboolean X0 X1)) \quad (2)$$

Assume the following.

$$v1_xboolean k1_xboolean \quad (3)$$

Assume the following.

$$\forall X0.(v1_xboolean X0) \Leftrightarrow ((X0 = k1_xboolean) \vee (X0 = k2_xboolean)) \quad (4)$$

Assume the following.

$$k2_xboolean = np_1 \quad (5)$$

Theorem 1

$$\forall X0.(v1_xboolean X0) \Rightarrow (\forall X1.(v1_xboolean X1) \Rightarrow (k5_xboolean X0 (k5_xboolean X0 X1) = k5_xboolean X0 X1))$$