

t120_xboolean
(TMKQq7AhHVbJin9PS4Vp9LRwJ5KutC4PprF)

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Let $v1_xboolean : \iota \Rightarrow o$ be given. Let $k6_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboolean : \iota$ be given. Let $k3_xboolean : \iota \Rightarrow \iota$ be given. Let $k10_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (\forall X1.(v1_xboolean X1) \Rightarrow (k10_xboolean X0 (k6_xboolean X0 X1) = k8_xboolean X0 X1)) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (\forall X1.(v1_xboolean X1) \Rightarrow (k10_xboolean X0 (k6_xboolean X0 X1) = k5_xboolean (k3_xboolean X0) (k3_xboolean X1))) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (k8_xboolean X0 X0 = k3_xboolean X0) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (k6_xboolean X0 X0 = k2_xboolean) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (v1_xboolean (k3_xboolean X0)) \quad (5)$$

Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (\forall X1.(v1_xboolean X1) \Rightarrow (k6_xboolean X0 X1 = k5_xboolean (k3_xboolean X0) X1)) \quad (6)$$

Assume the following.

$$k2_xboolean = np_1 \quad (7)$$

Theorem 1

$$\forall X0.(v1_xboolean X0) \Rightarrow (\forall X1.(v1_xboolean X1) \Rightarrow ((k6_xboolean X0 X1 = k2_xboolean) \wedge (k6_xboolean X0 (k3_xboolean X1) = k2_xboolean)) \Rightarrow (k3_xboolean X0 = k2_xboolean))$$