

t142_xboolean
(TMKP5cDEAr3qAuhmttw39EH6FPwMagu1cWv)

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Let $v1_xboolean : \iota \Rightarrow o$ be given. Let $k7_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboolean : \iota \Rightarrow \iota$ be given. Let $k1_xboolean : \iota$ be given. Let $k6_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboolean : \iota$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (k3_xboolean (k6_xboolean X0 X0) = k1_xboolean) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (\forall X1.(v1_xboolean X1) \Rightarrow ((k7_xboolean X0 X1 = k2_xboolean) \Leftrightarrow ((k6_xboolean X0 X1 = k2_xboolean) \wedge (k6_xboolean X1 X0 = k2_xboolean)))) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (k3_xboolean (k7_xboolean X0 (k3_xboolean X0)) = k2_xboolean) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (k7_xboolean X0 X0 = k2_xboolean) \quad (4)$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.((v1_xboolean X0) \wedge (v1_xboolean X1)) \Rightarrow (v1_xboolean (k7_xboolean X0 X1)) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (v1_xboolean (k3_xboolean X0)) \quad (7)$$

Assume the following.

$$k1_xboolean = k6_numbers \quad (8)$$

Theorem 1

$$\forall X0.(v1_xboolean X0) \Rightarrow (k7_xboolean X0 (k3_xboolean X0) = k1_xboolean)$$