

t110_xboolean
(TMVCVRUro3Z6Uk7EUckGrdHLfVGAhUsA1i1)

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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 $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $np_0 : \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k11_arytm_3 : \iota$ be given. Let $k1_xboolean : \iota$ be given. Let $np_1 : \iota$ be given. Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (\forall X1.(v1_xboolean X1) \Rightarrow (k6_xboolean X0 (k6_xboolean X1 X0) = k2_xboolean)) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xboolean X0) \Rightarrow (k6_xboolean X0 X0 = k2_xboolean) \quad (2)$$

Assume the following.

$$v1_xboole_0 np_0 \quad (3)$$

Assume the following.

$$k6_numbers = k1_xboole_0 \quad (4)$$

Assume the following.

$$k11_arytm_3 = k1_xboole_0 \quad (5)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (X0 = k1_xboole_0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xboolean X0) \wedge (v1_xboolean X1)) \Rightarrow (v1_xboolean (k6_xboolean X0 X1)) \quad (7)$$

Assume the following.

$$v1_xboolean k2_xboolean \quad (8)$$

Assume the following.

$$v1_xboolean \ k1_xboolean \tag{9}$$

Assume the following.

$$\forall X0.(v1_xboolean \ X0) \Leftrightarrow ((X0 = k1_xboolean) \vee (X0 = k2_xboolean)) \tag{10}$$

Assume the following.

$$k2_xboolean = np_1 \tag{11}$$

Assume the following.

$$k1_xboole_0 = the \ (\lambda X0 : \iota.v1_xboole_0 \ X0) \tag{12}$$

Assume the following.

$$k1_xboolean = k6_numbers \tag{13}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xboolean \ X0) \Rightarrow (\forall X1.(v1_xboolean \ X1) \Rightarrow (\forall X2. \\ & (v1_xboolean \ X2) \Rightarrow (k6_xboolean \ (k6_xboolean \ X0 \ (k6_xboolean \ X1 \\ & \ X2)) \ (k6_xboolean \ X1 \ (k6_xboolean \ X0 \ X2)) = k2_xboolean))) \end{aligned}$$