t69_bvfunc_1 (TMUP236KbujVATbpCQhbQhsGUwDxuUSTaEB)

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Let $v1\_xboolean : \iota \Rightarrow o$ be given. Let $k6\_xboolean : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_margrel1 : \iota$ be given. Assume the following.

$$\forall X0.(v1\_xboolean\ X0) \Rightarrow (\forall X1.(v1\_xboolean\ X1) \Rightarrow (\forall X2. (v1\_xboolean\ X2) \Rightarrow ((k6\_xboolean\ X0\ (k6\_xboolean\ X1\ X2) = k8\_margrel1) \Rightarrow (k6\_xboolean\ X1\ (k6\_xboolean\ X0\ X2) = k8\_margrel1)))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xboolean\ X0) \Rightarrow (\forall X1.(v1\_xboolean\ X1) \Rightarrow (((X0 = k8\_margrel1) \wedge (k6\_xboolean\ X0\ X1 = k8\_margrel1)) \Rightarrow (X1 = k8\_margrel1))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xboolean\ X0) \wedge (v1\_xboolean\ X1)) \Rightarrow (v1\_xboolean\ (k6\_xboolean\ X0\ X1)) \tag{3}$$

Theorem 1

$$\forall X0.(v1\_xboolean\ X0) \Rightarrow (\forall X1.(v1\_xboolean\ X1) \Rightarrow (\forall X2. (v1\_xboolean\ X2) \Rightarrow (((k6\_xboolean\ X0\ (k6\_xboolean\ X1\ X2) = k8\_margrel1) \wedge (X1 = k8\_margrel1)) \Rightarrow (k6\_xboolean\ X0\ X2 = k8\_margrel1))))$$