t9_gate_1 (TMGcSEDwB1wV8JHFhZu6gWVdjU22i4rF6Nk)

October 27, 2020

Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k4\_gate\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.k4\_gate\_1\ X0\ X1 = k4\_gate\_1\ X1\ X0 \tag{1}$$

Theorem 1

$$\forall X0.\forall X1.(\neg(\neg v1\_xboole\_0\ (k4\_gate\_1\ X0\ X1))\wedge(v1\_xboole\_0\ (k4\_gate\_1\ X1\ X0)))\wedge(\neg(\neg v1\_xboole\_0\ (k4\_gate\_1\ X1\ X0))\wedge(v1\_xboole\_0\ (k4\_gate\_1\ X0\ X1)))$$