t29_fomodel0 (TM-RgDnxKTp9S6DQAGhUgm27d2BXdQpFDZVh)

October 27, 2020

Let $k5\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Assume the following.

$$\forall X0.k5\_xboole\_0\ X0\ X0 = k1\_xboole\_0 \tag{1}$$

Assume the following.

$$\begin{gathered}\forall X0.\forall X1.\forall X2.k5\_xboole\_0\ (k5\_xboole\_0\ X0 \\ X1)\ X2 = k5\_xboole\_0\ X0\ (k5\_xboole\_0\ X1\ X2)\end{gathered} \tag{2}$$

Assume the following.

$$\forall X0.k5\_xboole\_0\ X0\ k1\_xboole\_0 = X0 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.k5\_xboole\_0\ X0\ X1 = k5\_xboole\_0\ X1\ X0 \tag{4}$$

Theorem 1 $\forall X0.\forall X1.(k5\_xboole\_0\ X1\ X0 = k1\_xboole\_0) \Leftrightarrow (X1 = X0)$.