

l2_modelc_3 (TMbqPdseLNHd- NaY1h12cgdMoP2EPusCFyd1)

October 27, 2020

Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k4_xboole_0 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 \in X0) \wedge (\neg X3 \in X1))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (X2 = k2_xboole_0 X0 X1) \Leftrightarrow (\forall X3. (X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \quad (3)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. \forall X3. \forall X4. (X0 \in k2_xboole_0 (k6_subset_1 X1 X2) (k6_subset_1 X3 X4)) \Leftrightarrow (((X0 \in X1) \wedge (\neg X0 \in X2)) \vee ((X0 \in X3) \wedge (\neg X0 \in X4)))$$