

t71_xboole_1 (TMZMRVhwEuPzkTmX-
PsMsv1yxwZHp48fk1CP)

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Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xboole_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Assume the following.

$$\forall X0. \forall X1. k2_xboole_0 (k3_xboole_0 X0 X1) (k4_xboole_0 X0 X1) = X0 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k4_xboole_0 (k2_xboole_0 X0 X1) X1 = k4_xboole_0 X0 X1 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1_xboole_0 X0 X1) \Leftrightarrow (k3_xboole_0 X0 X1 = k1_xboole_0) \quad (3)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. ((k2_xboole_0 X0 X1 = k2_xboole_0 X2 X1) \wedge ((r1_xboole_0 X0 X1) \wedge (r1_xboole_0 X2 X1))) \Rightarrow (X0 = X2)$$