

t81_xboole_1
(TMWFye4cteFLUzqT53Aoeqb6aB7t6N4W2)

October 27, 2020

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

$$\forall X0. \forall X1. \forall X2. k3_xboole_0 X0 (k4_xboole_0 X1 X2) = k4_xboole_0 (k3_xboole_0 X0 X1) X2 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1_xboole_0 X0 X1) \Leftrightarrow (k3_xboole_0 X0 X1 = k1_xboole_0) \quad (2)$$

Assume the following.

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

Theorem 1

$$\forall X0. \forall X1. \forall X2. (r1_xboole_0 X0 (k4_xboole_0 X1 X2)) \Rightarrow (r1_xboole_0 X1 (k4_xboole_0 X0 X2))$$