

t117_xboole_1 (TMFmrU-
uwmYZ1wRNnE8AQXX8HchLrF33vqpp)

October 27, 2020

Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. k4_xboole_0 X0 (k4_xboole_0 X1 X2) = k2_xboole_0 (k4_xboole_0 X0 X1) (k3_xboole_0 X0 X2) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k4_xboole_0 X0 (k4_xboole_0 X0 X1) = k3_xboole_0 X0 X1 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Rightarrow (k3_xboole_0 X0 X1 = X0) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. k3_xboole_0 X0 X1 = k3_xboole_0 X1 X0 \quad (4)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. (r1_tarski X2 X1) \Rightarrow (k4_xboole_0 X0 X2 = k2_xboole_0 (k4_xboole_0 X0 X1) (k3_xboole_0 X0 (k4_xboole_0 X1 X2)))$$