

t110\_xboole\_1  
(TMEvK5ok28YEX23grTV2RFBa3xckL3o9FXx)

October 27, 2020

Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (X0 \in k5\_xboole\_0 X1 X2) \Leftrightarrow (\neg(X0 \in X1) \Leftrightarrow (X0 \in X2)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (2)$$

**Theorem 1**

$$\forall X0. \forall X1. \forall X2. ((r1\_tarski X0 X1) \wedge (r1\_tarski X2 X1)) \Rightarrow (r1\_tarski (k5\_xboole\_0 X0 X2) X1)$$