

t88\_xboole\_1 (TMdcp-  
WQY4jTVUqVyVfWHYHEVks4dk4tkV7)

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Let  $r1\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (r1\_xboole\_0 X0 X1) \Leftrightarrow (k4\_xboole\_0 X0 X1 = X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k4\_xboole\_0 (k2\_xboole\_0 X0 X1) X1 = k4\_xboole\_0 X0 X1 \quad (2)$$

**Theorem 1**

$$\forall X0. \forall X1. (r1\_xboole\_0 X0 X1) \Rightarrow (k4\_xboole\_0 (k2\_xboole\_0 X0 X1) X1 = X0)$$