

t113\_xboole\_1 (TM-  
TULtM9XgKcBdrtwWTdAHcGbXZT7Pzi46B)

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

$$\forall X0. \forall X1. \forall X2. k2\_xboole\_0 (k2\_xboole\_0 X0 X1) X2 = k2\_xboole\_0 X0 (k2\_xboole\_0 X1 X2) \quad (1)$$

**Theorem 1**

$$\forall X0. \forall X1. \forall X2. \forall X3. k2\_xboole\_0 (k2\_xboole\_0 (k2\_xboole\_0 X0 X1) X2) X3 = k2\_xboole\_0 X0 (k2\_xboole\_0 (k2\_xboole\_0 X1 X2) X3)$$