

t31\_xtuple\_0  
(TMJg9hd9VGuxtEvGFUUSaUG4WMP88jF6ZTf)

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Let  $k11\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. k9\_xtuple\_0 (k2\_xboole\_0 X0 X1) = k2\_xboole\_0 (k9\_xtuple\_0 X0) (k9\_xtuple\_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. k11\_xtuple\_0 X0 = k9\_xtuple\_0 (k9\_xtuple\_0 X0) \quad (2)$$

**Theorem 1**

$$\forall X0. \forall X1. k11\_xtuple\_0 (k2\_xboole\_0 X0 X1) = k2\_xboole\_0 (k11\_xtuple\_0 X0) (k11\_xtuple\_0 X1)$$