

t120_relat_1
(TMJjTkcNefD15eydgnPoirp5bDzZ79ZSNAu)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $k7_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (v1_relat_1 X2) \Rightarrow (k5_relat_1 X2 (k2_xboole_0 X0 X1) = k2_xboole_0 (k5_relat_1 X2 X0) (k5_relat_1 X2 X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k10_xtuple_0 (k2_xboole_0 X0 X1) = k2_xboole_0 (k10_xtuple_0 X0) (k10_xtuple_0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow (k10_xtuple_0 (k5_relat_1 X1 X0) = k7_relat_1 X1 X0) \quad (3)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. (v1_relat_1 X2) \Rightarrow (k7_relat_1 X2 (k2_xboole_0 X0 X1) = k2_xboole_0 (k7_relat_1 X2 X0) (k7_relat_1 X2 X1))$$