

# t178\_relat\_1 (TMdHCnN- MuxU9WKzod9yzNdTXtv6psQv5JJs)

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Let  $v1\_relat\_1 : \iota \Rightarrow o$  be given. Let  $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_xtuple\_0 : \iota \Rightarrow \iota$  be given. Let  $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. (v1\_relat\_1 X1) \Rightarrow (k9\_xtuple\_0 (k5\_relat\_1 X1 X0) = k3\_xboole\_0 (k9\_xtuple\_0 X1) X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (v1\_relat\_1 X1) \Rightarrow (k9\_xtuple\_0 (k6\_subset\_1 X1 (k5\_relat\_1 X1 X0)) = k6\_subset\_1 (k9\_xtuple\_0 X1) X0) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (v1\_relat\_1 X1) \Rightarrow (k5\_relat\_1 X1 X0 = k5\_relat\_1 X1 (k3\_xboole\_0 (k9\_xtuple\_0 X1) X0)) \quad (3)$$

**Theorem 1**

$$\forall X0. \forall X1. (v1\_relat\_1 X1) \Rightarrow (k6\_subset\_1 (k9\_xtuple\_0 X1) (k9\_xtuple\_0 (k5\_relat\_1 X1 X0)) = k9\_xtuple\_0 (k6\_subset\_1 X1 (k5\_relat\_1 X1 X0)))$$