t177_relat_1 (TMU-Vmm2X8LihBUZsCeTvxD7uu6tuxrsQwzd)

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

$$\forall X0.\forall X1.\forall X2.(v1\_relat\_1\ X2) \Rightarrow (k5\_relat\_1\ X2\ (k6\_subset\_1\ X0\ X1) = k6\_subset\_1\ (k5\_relat\_1\ X2\ X0)\ (k5\_relat\_1\ X2\ X1)) \tag{1}$$

Assume the following.

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

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow (k5\_relat\_1\ X0\ (k9\_xtuple\_0\ X0) = X0) \tag{3}$$

Theorem 1

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